# Clinical Lecture
ON
# DISEASES OF THE BLADDER REQUIRING THE RETENTION OF A CATHETER.

*Delivered at Westminster Hospital.*

BY BARNARD HOLT, F.R.C.S.,
SENIOR SURGEON TO THE HOSPITAL.

GENTLEMEN,—During the last few months you have had various opportunities of witnessing the benefits that have arisen from the retention of the winged india-rubber catheter in the bladder in cases where the patient has been unable to micturate excepting through a tube; and I purpose to-day to draw your attention, among others, to the case of Charles R——, who is at present under my care in Matthew ward, as one specially illustrative of this method of treatment. Although on the present occasion I shall mainly refer to this case, yet I may mention that the treatment is equally applicable to cases of atony or paralysed conditions of the bladder, either associated or unconnected with enlargement of the prostate gland; and I may also add that, wherever a catheter can be worn, the flexible winged one is the most successful.

Charles R——, aged fifty-two, a traveller, was admitted under my care on August 8th, 1870. He had been frequently the subject of both syphilis and gonorrhœa, and for the last fourteen months he had experienced great and increasing difficulty in passing his urine, which is now loaded with mucus and pus. The desire to micturate is very frequent, and he cannot expel more than two tablespoonfuls of urine at a time. He has constant pain over the pubes and at the prostate, and also pain in the glans penis after micturition; and a purulent and bloody discharge exudes from the end of the penis. His aspect is careworn and anxious, and he is very much thinner. His nights are restless, and his general health is materially damaged.

An examination per urethram proved the absence of stricture. A large-sized catheter could be readily passed, but it produced great agony as it entered the bladder. The examination per anum proved the prostate enlarged, and it was very painful on pressure. An examination of the urine proved the presence of albumen, mucus, pus, and vesical epithelium. It presented a white filmy aspect, and was highly ammoniacal. About two ounces and a half of urine were removed by the catheter, and no greater quantity of warm water could be injected. A subsequent examination with a sound proved the bladder free from calculus.

Here, then, was a case in which the diagnosis was not difficult, but where the prognosis was doubtful. The examination with the sound proved the absence of calculus in the bladder. The symptoms did not warrant the conclusion that there was stone in the kidney, for in calculus pyelitis there is usually lumbar pain, increased by exertion, and the penis pain precedes micturition, and is always relieved when the bladder is emptied. In calculus vesicæ, or ulceration of the neck of the bladder, the pain is after micturition, and results from the empty bladder grasping the stone, or approximating the ulcerated surfaces. In this instance the introduction of an instrument produced intense pain as it passed over the neck of the bladder; and when that viscus was emptied, the suffering was greatly increased, but at once relieved by injecting a small quantity of warm water. As mentioned before, the urine was loaded with pus and mucus; and, to assist the diagnosis, it was necessary to ascertain whether this was secreted by the bladder or kidney. All the urine was, therefore, removed by the catheter, and the bladder was washed out with warm water until the water so injected came away clear. A small quantity of urine was now collected in a test tube, as quickly as it was secreted, and, when examined, only a trace of mucus could be detected; and so far, when taken in connexion with the abundant bladder epithelium, tended to prove that the disease was confined to the bladder and prostate. Thus the case was clear: chronic inflammation and temporary contraction of the bladder, with either abscess or ulceration of the vesical aspect of the prostate. There was no reason to believe, either from the history or the aspect of the patient, that the disease was malignant. With such a diagnosis the prognosis was doubtful; but the treatment was clear: absolute rest in the horizontal position, the retention of a soft and perfectly flexible catheter in the bladder, frequent removal of the fetid urine, injections of warm water after the urine was withdrawn, improvement of the general health by suitable medicines, and the use of opiate suppositories to relieve pain. And this was the outline of treatment adopted; and you have now the opportunity of seeing the result. The patient bears no longer an aspect of suffering, he has gained considerably in weight, his appetite is good, his functions properly performed; his bladder will now hold ten ounces of urine, which is perfectly clear, devoid of pus or mucus, and deprived of the epithelium, which escaped so freely before. There is, however, the anticipated drawback. He cannot empty the bladder without the aid of the catheter, and I fear he never will; but this is of little moment compared with his wretched state on admission, for, being now taught to pass his own catheter, he can relieve the bladder at will.

It is not, however, to cases of enlarged prostate and its consequences that the use of the winged catheter should be confined. A very interesting example of retained urine, the result of atony of the bladder, has lately come under my care.

J. M——, aged sixty-five, who, excepting for his bladder ailment, was a moderately healthy man, consulted me for what was supposed to be irritable bladder. He stated that, in consequence of the peculiarity of his business, he had for some years habitually retained his urine for a longer period than was desirable. Two years previously to my seeing him he had retention of urine, and since that period he has been compelled to pass water every hour or hour and a half. The quantity ejected is very small, highly ammoniacal, and containing both mucus and pus. His health is now impaired, and for the last twelve months he has constantly worn an india-rubber urinal. An examination of his abdomen revealed a distended bladder, which was further confirmed by the introduction of a catheter, and the removal of two pints of fetid urine. I requested his surgeon to empty the bladder twice in the twenty-four hours, and decided when his urethra was less sensitive to introduce the self-retaining catheter, so that he might relieve himself at will. Unfortunately, in passing the catheter, his surgeon lacerated the prostate, which occasioned considerable hæmorrhage, and subsequent inflammation of the bladder. Rest, opium, and leeches to the perineum having subdued this, the winged catheter was introduced, and the patient was desired to remove the urine every four hours, and wash out the bladder with tepid water night and morning. The character of the urine speedily improved; it lost its ammoniacal fetor, and the mucus and pus gradually diminished. His health was gradually regained, and he is now so far well that he can resume his business. The catheter is removed once in ten days.

Most of you will remember the old man with paralysis of the bladder associated with hemiplegia, who were one of the winged catheters for a period of five months. In his case the bladder was so small that it would not hold more than six or seven ounces of urine; so that it was necessary (previous to the winged catheter being worn) to draw off the urine six times in the twenty-four hours. Being incapable, in consequence of his paralysis, of passing a catheter for himself, he became a great tax on the house-surgeon; but after the winged catheter was inserted, no further trouble was occasioned—the nurse could remove the peg and relieve him without difficulty.

I could multiply these cases both from my hospital and private practice, were it necessary to do so; but I feel that the examples I have related to you are sufficient to show you that in cases of enlarged prostate, and atony or paralysis of the bladder, the winged catheter is of essential service; and in most cases it can be worn with but trifling inconvenience.

I will now relate an interesting case of numerous fistulous openings in the perineum and scrotum that was speedily cured by the retention of the catheter.

An officer in the Indian army, who had long suffered from

stricture of the urethra, consulted me in consequence of the serious inconvenience occasioned by the urine escaping from numerous channels in the perineum and scrotum. He had suffered from extravasation of urine, and from abscess; and he was now compelled to sit over a large pan whenever he required to pass his urine. There were two fistulous apertures in the perineum, one in the scrotum, and a fourth in the buttock.

At my first examination I experienced great difficulty in passing a No. 1 catheter. There was a tight stricture in the spongy portion of the urethra, which grasped the instrument with great tenacity. On my next seeing him I passed a No. 1 gum elastic catheter, which was retained, and in two days I was enabled to introduce the dilator, split the stricture, and pass a No. 9 winged elastic catheter. He suffered very little inconvenience from the operation, and he wore the catheter with ease. The urine now escaped entirely through the catheter, and he could remove it at will. After the lapse of a week it was withdrawn, and found to be slightly coated with phosphates. This was washed off, and the same instrument again inserted. To prevent the redeposit of phosphates he was directed to inject a weak solution of hydrochloric acid twice a day; and when the catheter was again removed it was free from any deposit. This gentleman continued to wear the catheter for a period of four months, when the fistulous openings had entirely healed. The instrument was then removed, and the urine flowed in a good stream. He was taught to pass his own bougie, and has returned to India perfectly well.

I have now related to you four cases as examples of different forms of disease in which the winged india-rubber catheter may be worn with advantage, and I wish particularly to impress upon you the fact that where a catheter *can be borne* the india-rubber one gives the greatest comfort, and secures to the patient the command of the bladder without the chances of its escaping, and without the necessity of its being fixed by tapes or any other contrivance.

I have used the expression "where it can be borne," because there are many cases where the retention of any instrument excites so much irritation that the patient cannot bear it, and in private I have found this more frequently than in hospital practice. Private patients, as a general rule, will not persevere where pain is occasioned, and they will not consent to remain in bed until the urethra and bladder become accustomed to an instrument. In hospital cases the patients are under more control, and you will often succeed with them when you cannot do so in private. On the other hand, there are a certain number of sensitive persons who cannot bear the retention of a catheter under any circumstances, consequently you must not consider this method of treatment as applicable to all. Where any other catheter can be retained there, the india-rubber one is infinitely to be preferred, but where the patient is specially sensitive, some other plan must be adopted.

To estimate the value of this kind of treatment you must inquire into the pathological changes that take place in the genito-urinary apparatus. Retained urine not only produces enlargement of the bladder and distension of the ureters and pelvis of the kidney, but disease of the kidney itself, and it is only when the bladder is enormously distended with urine that it can be acted upon by the pressure of the abdominal muscles, the contraction of which squeezes out a small quantity of urine, which gives relief for the time. But in cases where the bladder is hypertrophied and contracted, the patient suffers from absolute retention; the bladder has no power to contract, and no muscular force of the abdominal walls can assist it; and when we recollect that in addition to this, retained urine produces chronic inflammation of the bladder, resulting in not only decomposition of the urine, but a large secretion of mucus and pus, with shedding of bladder epithelium, we cannot be surprised at the fatality of such cases. The patient in very many instances not only endures extreme suffering, but he is continually poisoned by the absorption of the perverted urine, and gradually and surely dies.

I have hitherto only spoken of the mechanical means by which good can be effected; but, although it must be admitted that, in the main, mechanical means must be resorted to, yet great assistance is frequently obtained by the judicious administration of certain drugs. Copaiba is frequently very serviceable. Hydrochloric acid and opium may be prescribed with advantage. Quinine, where the health is failing, is especially valuable. But, whatever adjunct you may choose, nothing will supersede the removal of the urine and washing out the bladder with tepid water. I have occasionally used weak hydrochloric acid, or highly diluted carbolic acid; I cannot, however, say that I have ever seen any decided advantage from either, and I believe warm water is better than anything else.

The catheter is made of india-rubber, with wings to prevent its escape from the bladder, and is similar to that of which there was an engraving in THE LANCET some months since. It has the advantage of being self-retaining, and is indestructible; and it may be worn for any time without removal, provided it remains free from phosphatic deposit. To determine the special tendency to this, I always advise that the catheter should be removed at intervals, at first of four or five days, the intervals being gradually increased in accordance with the tendency to deposit; for while in some cases it may be worn for a month without any accumulation on its end, in another phosphates may be detected after the expiration of a few days. This rule should not under any circumstances be departed from.

In order to prevent this accumulation, I have latterly used the catheter with the addition of a highly polished silver cap, which not only facilitates its introduction, but certainly prevents phosphatic deposit in anything like the time that it will become affixed to the india-rubber. Mr. Baker is now making these caps, which will before long be ready for use.

## TYPHOID FEVER AND DYSENTERY AT THE SEAT OF WAR.

BY HERMANN WEBER, M.D., F.R.C.P.,
PHYSICIAN TO THE GERMAN HOSPITAL.

As the medical incidents of the war between France and Germany are of some interest to most of the readers of THE LANCET, I beg to lay before them part of a letter just received from Dr. Wibel, one of our resident medical officers at the German Hospital. Dr. Wibel belongs as "Battallionsargt" to the second principal field hospital of the Bavarian army, and is stationed at one of the barrack hospitals near Nancy. In his letter, dated November 17th, he says:—

"Though we have no wounded, we attend a great number of cases of typhoid fever, dysentery, and complications of both diseases, affording plenty of work of the greatest interest. Our barrack hospital forms now a complete medical colony. We have separate localities for the administration, kitchens, cellars for washing and drying, &c.; we have a chapel, convalescent rooms, quarters for officers and medical men, a dispensary, even our own public-houses—i. e., 'Marketenderchalets.' There is a regular omnibus serving to and from the town twice a day, and a temporary railway line facilitates the transport of the sick and wounded. We have also at last good stores of food and other necessaries, but we fear they will soon be exhausted. Our greatest drawback is bad meat, which is 'required' of the town; and this is not improved by the manner of cooking. On the whole, however, the patients are doing well; they receive the most necessary things, though there is room for further wishes. Thus we not rarely are short of eggs, milk, and wine; and cigars begin to become very scarce.

"We have had many severe cases of typhoid fever and dysentery, and most troublesome is the complication of both. Exanthematic typhus in an unmistakable form we have not had, though we had cases in which the line of distinction between this and typhoid was difficult. During the last weeks the number and severity of epidemic diseases were diminished; and especially since the capitulation of Metz the health of the army is improved. Professor Niemeyer is in constant communication with us, and performs many post-mortem examinations. We have also formed a Medical Society, counting at present thirty-four members, Niemeyer being first, and Dr. Krulle second president, Dr. Hitzig, of Berlin, and myself, acting as secretaries. Four months ago I had not dreamt that I should now be a member of a German Medical Society at

Nancy. We hold our meetings every Saturday in the Lyceum; and in addition to the usual communications a weekly report is given of the movement of diseases during the past week. I wish you could see the specimens of complications of dysentery and typhoid fever; they are, indeed, very interesting. As to the treatment of disease in our barracks, it is, in general, symptomatic: in typhoid fever, cold baths, quinine, and roborantia of all kinds; in dysentery, opium, tannic acid, morphia, calomel, and various remedies for allaying pain. I have not seen any good effect of the latter on the course of the disease. The diarrhœa and the pain, it is true, are checked by large doses, but the collapse occurs all the same; the patients become unable to take food, and one is at last compelled to discontinue the narcotics. I confine myself at present to morphia, milk, eggs, hydropathic bandages, and strong wines, as I have convinced myself that the diarrhœic motions do not cease until the croupous and diphtheritic masses begin to be thrown off. In some desperate cases of dysentery I have used with rather satisfactory results—one case terminated fatally—enemas of tincture of opium and diluted carbolic acid, coupled with milk diet; and in one case I gave carbolic acid also internally. During, I will not say through, this treatment the exudation was cast off in perfect tubes. The diarrhœic motions still continued for some time, but the patients gradually recovered; while other patients, apparently not worse, under different treatment, succumbed.

"Repeatedly convalescents from typhoid fever were attacked by dysentery. In typhoid fever lobar pneumonia was frequent, while cerebral complications were rare; the typhoid roseola was often very abundant.

"Of 60 male and female attendants, 12 were infected, generally not seriously, with typhoid or dysentery; of 15 medical men, 1 contracted typhoid, 2 dysentery. I have always been myself quite well, taking horse exercise, clothing myself very warmly, living very regularly, without depriving myself of the excellent grapes of this neighbourhood.

"A few days ago we had the first snow and ice. The barracks answer admirably so long as our iron stoves are kept in good order and heated with coal. Each barrack has forty beds, and four stoves; and by means of double walls, and moss between them, we can keep the night temperature at between 10° and 12° [probably centigrade].

"The disinfection of motions &c. is performed by chloride of lime and sulphate of iron; all the straw once used is burnt immediately. We have our own water-supply, with abundance of running water."

I need not point out the interest attached to the simultaneous occurrence of typhoid fever and of dysentery in the same person. I have had myself the opportunity of witnessing this fact in a man who, while on the point of recovering from typhoid fever, was seized with dysentery, then epidemic at Bonn, to which complication he succumbed, the small intestines offering the typhoid, the rectum and large intestines the dysenteric changes.

The treatment of dysentery mentioned by Dr. Wibel is in accordance with what I saw myself in the neighbourhood of Metz and Pont-à-Mousson. Some of the medical men, however, were in favour of the plan which we had ourselves found most useful—viz., to give in the earlier stage, once or several times, aperients to unload the bowel, and thus diminish congestion, and to use at the same time, or afterwards, local anodynes, by enemas or suppositories, or subcutaneous injections, feeding the patient almost entirely with iced milk.

It reflects credit on our profession that the medical men of the different parts of Germany, temporarily stationed at Nancy, excessively hard worked as they are, and in the midst of the most stirring events, have formed a Medical Society, and hold weekly meetings to exchange the results of their experience, to assist and teach one another, and to cultivate good fellowship.

Grosvenor-street, Nov. 22nd, 1870.

INITIAL EXANTHEMATOUS ERUPTION IN VARIOLA.—Dr. Simon calls attention, in the *Arch. für Dermatol. und Syphilis*, Part 3, 1870, to the eruption which is generally observed on the hands, dorsum of feet, front of the knees, and elbows. The duration varies from one to nine days, and the eruption begins on the second or third day of the attack of small-pox.

## ANTISEPTIC SURGERY.

BY JAMES MORE, M.D.

THE following cases are brought together, not with the intention of supporting any particular theory as to the origin of pus, or the production of suppuration in wounds, but simply as evidence—if further proof be needed—of the practical value and sound teaching of Lister's method of treating wounds and suppurating sores. The germ theory of Pasteur may or may not be sound in doctrine, yet the practical deductions and methods of treatment founded on his researches are undoubtedly of great scientific value. One reason the results obtained by others have not always come up to the wonderful success of the Edinburgh Professor, is, I think, the not carrying out the treatment in some of its special details. In the cases now recorded, the antiseptic treatment was not in every instance carried out in strict accordance with the rules laid down by Mr. Lister, yet in all the principle was the same, and that I take to be the disinfecting, and, as far as possible, the exclusion of the germ-poisoned atmosphere from the wound; and it will be seen that, in a clinical point of view, a large success was achieved in every instance.

CASE 1. *Compound Fracture of the Leg.*—John D——, aged fifty-four years. In the spring of 1868 he received a compound fracture of the leg, with protrusion of bone and laceration of skin. I put the limb up in a Macintyre splint, mopped out the wound with pure carbolic acid, afterwards dressing it with carbolic oil, one to eight, taking care to keep the wound well covered and moist by means of lint and oil-silk. Every morning I poured in some carbolised oil, without removing the original dressing; and at the end of one week from receipt of injury the wound was completely filled up by fine, healthy granulations. At the end of one week more it was quite healed over, and that without the formation of one single drop of pus.

CASE 2. *Compound Fracture of the Finger.*—Emma M—— had the middle joint of her forefinger torn open in a clay-mill. By bending the finger a little to one side, the cartilaginous ends of the bone were exposed; in fact, the finger seemed almost detached. Small splints, made from a willow-box, were applied, and the wound dressed with the carbolic oil, the whole finger being covered with oil-silk and a bandage. At the end of one week the wound was granulating beautifully, there was little or no swelling, and scarcely a drop of pus. At this stage the girl left the village for ten days, during which time the antiseptic oil was not applied, the consequence being severe suppurative inflammation of the joint, accompanied by pain, and a certain amount of constitutional disturbance. When she returned to the surgery the joint was very much enlarged, and suppurating profusely. New splints and the carbolic oil were applied as before, and almost at once the character of the wound was changed. Three weeks from her second appearance at the surgery all trace of suppuration had left, the wound almost healed over, absorption of the surrounding œdema rapidly going on; and I need only add that, though rather stiff, it turned out a very useful finger. *Without the carbolic acid I should have been obliged to amputate.*

CASE 3. *Acute Suppurative Synovitis.* — John E——, aged forty-eight, fell off a velocipede on the 11th of June, and bruised his right knee. One week after I saw him for the first time, and found all the symptoms of acute synovitis. In spite of active antiphlogistic treatment, with absolute rest in bed, the case soon drifted into one of intense suppurative inflammation of the deep structures, so that three weeks after the accident the following symptoms presented themselves: the entire joint enormously swollen, inflamed, red, and exquisitely painful, especially on the outer aspect; the patella floating in fluid—that fluid pus, judging from the frequent rigors and other symptoms of constitutional disturbance; there was also a great amount of inflammatory œdema both below the knee and extending beyond the lower third of the thigh. As the local and general treatment had as yet failed in giving relief from the intense pain, and as the amount of fluid in the joint seemed on the increase, and the risk of disorganisation of structure immi-

nent, I considered myself justified in adopting that course so successful in the hands of Mr. Bickersteth. On the 4th of July, then, I evacuated the joint by means of an ordinary hydrocele trocar, drawing off about three ounces of thick bloody pus. I then injected through the canula a solution of carbolic acid of the following strength: carbolic acid (Calvert's), one drachm and a half; water to eight ounces;—filling and emptying the cavity of the joint till the solution returned comparatively free from pus or blood. This required some time and patience, as the "cores of matter" and the synovial fluid every now and then blocked up the canula. After carefully pressing out all the pus, I applied the usual carbolic oil, using four layers of lint, and good stout oiled silk on the top. During the next three days there was a good deal of redness and swelling over the joint, but little or no pus, the latter gradually giving place to bloody lymph. On the 20th of July the swelling and redness were quite gone. There were three small openings on the outer aspect of the knee, from which came lymph, an occasional clot of blood, but not a trace of pus. In removing the dressings, care was always taken to have a fresh one ready to slip on, so that the wound was not at any one time exposed for more than a second. I now ordered him some muriate of chinchonine, the pain and other joint disturbance having pulled him about considerably.

August 15th. — The knee seems almost well. The swelling is completely gone, though there is still tenderness on pressure. The small fistulous openings are not yet healed up, and are giving out not only lymph, but synovial fluid. The general health is very much improved, appetite good, bowels regular, and sleep natural. In order, if possible, to heal the openings, I dressed them with white zinc ointment, but kept the lint saturated with the carbolic oil on the outside, feeling afraid to discontinue the latter in case suppuration should return. Ordered him a mixture of iodide of potash, the chinchona to be taken in a little wine.

Sept. 15th.—My patient is now able to walk about, using a crutch only when out of doors. All the openings healed. The joint has returned to its natural size, though still somewhat stiff.

There is nothing more worth reporting, and I need only add that in a very few weeks he had perfect movement in the joint, and can now walk about without the aid of either stick or crutch.

The constant application of the oil has had the effect of producing a thick crop of black hair all over the knee. The patient had what may be called hairy legs, but the amount of hair on the bad knee is something remarkable; it looks just like a child's head.

CASE 4. *Cut-throat.*—On the 5th of April, at eight in the morning, Benjamin C——, aged sixty-six, was discovered sitting in a common privy, bleeding profusely from a fearful gash in his throat. The instrument used was a blunt razor, and the character and extent of the wound at once indicated the position in which he had sat, and the way he had accomplished the deed. He resisted very strongly our efforts to remove him and to get him home; indeed, he seemed to be in a state of insane ecstasy, his eyeballs being fixed and protruding, and his muscular system in a state of extreme rigidity. The wound was situated in the angle of the throat and lower jaw, and extended into the mouth, separating the larynx and œsophagus from their anterior pharyngeal attachments. Through the external opening I could put my finger into the larynx or into the œsophagus, and it was interesting to notice the lifting up and protrusion of the former during the abortive attempts at swallowing, induced, I have no doubt, by the blood trickling over and irritating the epiglottis.

Cases where disease or injury, as in the above case, has laid bare the structures concerned in deglutition, have been carefully examined and detailed by Bidder, Kobelt, and Hoeggerath; and it may be said that the mechanism of this function is pretty accurately known. Yet there is one point not sufficiently insisted on, and that is the purely passive state of the epiglottis when acting as a curtain to the glottis during the act of deglutition. At the moment of swallowing, when the bolus of food is about to be impelled towards the cavity of the pharynx, the base of the tongue could be seen to be carried back and overlap the free margin of the epiglottis; the pharynx was then drawn up, and at the same moment the larynx was made to ascend so as to be brought under cover of and pressed up against the epiglottis. It was evident that the thyro-hyoideus, one of the chief elevators concerned in deglutition, must have been injured; but there remained the supra-hyoid group, whose action is similar to the last, being elevators both of the larynx and pharynx.

The treatment in this case was, as may be imagined, rather complicated and troublesome. The hæmorrhage being arrested, I proceeded to wash out the deeper parts of the wound, and stitch it up with wire sutures, leaving sufficient outlet in the middle of the opening for the discharge. In four days the swelling and irritation were so great that I was obliged to remove the stitches, and apply warm-water dressing. From the position of the opening at the angle of the jaw and throat, it was almost impossible to apply strapping, or indeed dressing of any kind; yet I felt it incumbent on me to get it closed in some form, as the external air rushing through such a large aperture directly into the larynx and chest was causing very great distress; indeed, the symptoms were those of acute laryngitis. The size of the opening at this stage was two inches long by one and a half broad, and partly embraced the thyroid cartilage. I now applied strips of adhesive plaster from the right clavicle across the wound, attaching them on the side of the neck of the left side, repeating the same on the other side. I then put a good layer of red oxide of zinc powder, into which had been rubbed some carbolic acid, on the straps and wound, and then applied collodion over all, so as to form a cement. This answered the purpose admirably, as it completely closed up the opening, prevented the access of cold air into the inflamed larynx, and favoured granulation. This plaster and cement remained adherent for ten days, and on its removal the throat seemed almost closed with fine, healthy granulations. As there was still much discomfort experienced from the profuse viscid pus getting into the pharynx and irritating the epiglottis, the usual carbolic oil (one to eight) was used, with lint and oil-silk. This had the effect of almost at once arresting suppuration, though there was still considerable discharge of laryngeal mucus. The latter, however, did not delay the healing process; and in a very few days, by the additional help of water dressings and red lotion, cicatrisation was accomplished. There remained now only two small fistulous openings, discharging laryngeal mucus, the latter coming out very freely during speaking or coughing. These openings I had great difficulty in closing, and it was only after repeated applications of a red-hot wire that they eventually healed. The man is now well, and at work, and walks about as if he had never attempted suicide.

I should mention that for three weeks I had to feed B. C—— entirely by the stomach-pump.

Rothwell, Northamptonshire, Nov. 5th, 1870.

## DELUSIONS AND HALLUCINATIONS.

BY J. HAWKES, M.D.,

ASSISTANT MEDICAL OFFICER TO THE MIDDLESEX COUNTY LUNATIC ASYLUM, HANWELL.

(*Concluded from page 777.*)

G. F. M——. Four years past complained of headache, giddiness, and weakness; became reserved and depressed. Medical aid was resorted to without benefit, and his mind failed. Became fretful and irritable. Talked incoherently, chiefly on religious subjects. Said he had been up in heaven and come down again. Walked into a pond on Hampstead-heath, and wished his wife to go there too, as "a way to heaven." Was out all one night wandering about. Said he was very rich, and that Lord A—— intended to bequeath to him the whole of the British dominions.

G. M. N——. Fancied that his wife intended to poison him, and had put something into the teapot for that purpose; that his neighbours meditated his destruction, and were "setting the devil upon him." He would shout "Murder!" from the windows, and call for the police to protect him.

B. C——. Had delusions that he was robbed; that the house was entered by thieves, who broke open his drawers, stole his clothes, &c. He used daily to open the drawers, take out their contents, and put them in other places;

after some hours, unlock the drawers again, and, on seeing them empty, say the articles were stolen.

T. L——. Had yellow fever in New Orleans; recovered imperfectly; jumped into a river; was sent to an asylum; discharged, and sailed for England. Manifested mental aberration on the voyage; fancied he was charged with a grave crime, and that the police were in pursuit of him. After arriving in England, said that Mormonite agents were in quest of his wife, and emissaries from houses of ill-fame were seeking for her. Heard voices from the wall talking to him, and applying opprobrious epithets to his wife.

G. A. N——. Having been told that a copy he had made of a picture of Christ was very like himself, he took up the notion that he was Christ; and has several times written to the Queen and others of the Royal Family, signing himself "Jesus Christ."

W. B——. Used to write letters to clergymen and others, saying he was deprived by them of his rights, kept out of property, persecuted and even crucified. Said he was a person of high station, the Saviour of the world; that he had holes in his hands and feet through the nails passed when he was fastened to the cross.

J. S——; a coachman; sober; of delicate health. Suffered much from headache; giddiness increased; and he had a paralytic stroke. Recovered his speech, and resumed his occupation. A year after had a second seizure; became incoherent. Spoke of his wealth. Said there were railways in the air; that all objects were of one colour—viz., green; and that he saw things come out of his eyes when asleep.

E. C——. Suffered much when a soldier in the Indian mutiny; was overworked and exposed to great heat. He began to fancy his comrades conspired against him, and attempted to poison his food. Said that vapours of a noxious character were raised before his eyes. Upon returning to England he said he heard the old woman shouting after him who had followed him from China; and that his bowels only acted under military orders.

W. M——. Excessive fatigue and hard labour are thought to have disturbed his mind. Became childish; collected stones, placing them in his pocket; plucked flowers, and fixed them in his hat, saying they were stars. Called a cow a horse, a dog a cat, &c.

W. R——; a gardener. Went one day to his wife, gave her the key of the garden, saying "he had done with work for ever; that he had amply provided for himself and his family." Told his mistress the next day that he should buy a handsome carriage, and drive her about; that he should make her Empress of the French.

E. L——; a graduate of Oxford; contemplated taking orders. Was reproved for levity by the bishop, whom he had called upon with a view to that object. Became negligent of his person; sat gazing stedfastly at the fire; was taciturn; indifferent to food; did not read. Had previously exhibited similar traits at Oxford. Subsequently he carried an open penknife about with him; attempted to injure his mother with a "life preserver"; said he heard voices, whisperings, and sounds of persons following him.

J. J——; aged sixty-eight. Disabled by illness from following his occupation; fretted at this; passed restless nights; walked up and down his room. Said persons were opposed to him, and desirous of ruining his reputation; that the food placed before him was not paid for, but stolen; that if he partook of it he would be arrested. Every knock he heard at the door he thought was that of a policeman. Attempted suicide.

T. W——. Was habitually odd in his conversation and deportment. Thought he could alter the weather by regulating his diet, and by the same means could change the disposition and conduct of other persons. Slept badly; said he had pins in his head, and that he had swallowed needles; that persons living in the room above were admitting cold and hot air upon him through the ceiling.

J. H——; sheriff's officer. Said persons were meditating his own and his wife's destruction; that they were to be poisoned; that his neighbours were spies; that they overheard all he said. He therefore spoke only in whispers, so as scarcely to be heard by those in the room with him. His actions were surrounded by a good deal of mystery and secrecy.

J. A. C——; aged twenty-nine; generally steady and temperate. Has suffered from twitchings of the face from childhood, and has always complained of headache. His mind has been affected for the last three years, during which time he has constantly said that he had a disagreeable smell, as though something very offensive was present in his nostrils. Thought he was being bent backwards, and felt a burning pain in his spine. Said he must kill some member of his family, and pointed out to his mother the place where he meant to put her body, in a pond near the house.

J. P——; Wesleyan. Was in the habit of reading religious books till a late hour after returning from his day's work. A short time ago his mind became affected. He was timid, and said there were ghosts in the house; that robbers were concealed in it; that he knew persons were prowling about the neighbourhood night and day, intending to injure him, and determined to snatch him up and run off with him.

A. E——, aged twenty-six; a commercial clerk, on a very small salary. Fretted at the narrowness of his income. Had been, when a boy, often uneasy and perplexed about his parentage, having lost his father in infancy. Often asked his mother, with earnestness, whether he was the son of a peasant or a prince; sometimes fancied that his guardian was his father. Three years ago he began to manifest symptoms of insanity: said that one of his children was not his; that his wife was unfaithful; that she was plotting his destruction and endeavouring to poison him; that she put something into the water in which he washed to thicken his skin and render it coarse, that he might not appear to be what he was, a person of high rank. Gave up his situation under the impression that his employer held funds in trust for him, and that the amount would be retained so long as he continued in his service. Was alternately depressed and excited. Went to Windsor and left a letter at the Castle for the Queen. Styled himself "Prince of Wales" and "Duke of York." Said that the officials in the workhouse darkened his skin, and that people in the street aimed at his life.

J. W——. Suffered from pecuniary embarrassment; fretted at this. Was afraid he should be sued, put in prison, and come to beggary. Passed sleepless nights. Stayed half the day in bed. Said someone was constantly striking him about the head. Fancied he saw evil spirits, and that he was going to hell to whitewash the devil.

W. E——. Was dismissed from his employment. This preyed on his mind; he became violent and excited; said he should be king; that he was the Saviour; a prophet; that he was to reclaim and redeem the world; took red-hot coals in his hands; said they could not hurt him.

L. H——. Was always idle, unsteady, and dissipated; given to stray from home and wander at large. Has lately talked incoherently, and boasted that he possessed large estates in Yorkshire; that he is Marquess of Bulstrode, Earl of Holderness, and King of Scotland. Proclaimed himself by this title at the Princess's Theatre; and on another occasion presented a pistol at a lady and gentleman in a box at Covent-garden Theatre. Wrote letters to the Queen, offering to come to terms respecting his kingdom of Scotland.

T. R——. Had a quarrel with his wife; broke up his home; sold off the furniture; spent the money in dissipation. Was reconciled to his wife; told her she had raised a rebellion, caused an insurrection, and must be put to death.

B. B——. Has complained for a long time of headache and weakness. Has been incapable of applying himself to his business as a shopman. Spoke incoherently; said he could read persons by their eyes; stared hard at the customers in the shop. Said that a dog in the house was a fiend pursuing him.

C. W——. Fell off an omnibus eight years ago; was taken up insensible; remained unconscious for several weeks. Had a fit a fortnight after. Partially recovered. Resumed his occupation. Had fits more frequently of late; was giddy; talked incoherently; said the clock was wrong; that it was night when it was day; that there were rats in his cap; that he could not see in consequence of the number of flies in the air.

E. U——. Became depressed and reserved. Said there was a mouse gnawing at his heart, and it would devour him altogether.

W. J. R——. Drank hard formerly. Has been temperate of late. Did not succeed in business; fretted on this ac-

count; passed restless nights; became excited; said he was the second Saviour of the world. Threw away his money; said it was not right for him, a divine person, to hoard up wealth.

T. B——; a labourer; sober and steady. Has been latterly in the habit of reading the Bible and religious books; sitting up late at night, depriving himself of rest and proper sustenance. Said he could influence the course of the sun and the motions of the heavenly bodies.

E. W——. Suffered from ill health, and fretted in consequence. Said the Lord had been with him all night and converted him, and had performed a miracle upon him by enabling him to see without spectacles, which he had worn from his youth; that he had amassed a fortune, and should become a minister of the Gospel.

T. K. G——. Said he was dead. Rolled himself up in sheets as if in a shroud, and desired an undertaker should be sent for to measure him for a coffin; said it must be a large one, as he had grown to a great size.

H. B——. Became violent. Talked incoherently. Said he was the son of Garibaldi—the Son of God; that he had been crucified, and was the Saviour of the world; that he could see from London to Haslar Hospital at Portsmouth.

E. E——. Became insane from domestic grief caused by the misconduct of a sister to whom he was much attached. Said he was in hell; that there was a large clock there; that it had seven hands, five of them being his children, and the other two his sister's bastards; that they were all pointing at him, and would soon get him into their clutches and tear him to pieces.

T. E——. Said his wife and children were in hell; that his house and effects must be burned, as a penalty upon him for not having told the truth to Jesus Christ in a conversation he had with him.

J. C——. Passed several sleepless nights. Was restless and uneasy for many days. Said he saw imps flitting in the air.

G. N——. Being much depressed, he began to have delusions. Said that the sheet of his bed was his shirt; that the quilt was his trowsers; that he caught birds in his bed—a goldfinch, a canary, and a lark. Took up pieces of rags, saying they were pigeons and crows. Folded up the carpet of his room, saying it was a railway.

R. T——. Said he was followed from place to place by police and soldiers; that men were in the house with handcuffs to arrest him; that the house was filled with rats; that he saw the devil. Attempted suicide.

J. B——. Was in St. George's Hospital for a severe attack of rheumatic fever. Said the nurse of the ward was attempting to poison him; that a coffin was ordered for him; that a patient in the next bed was abetting the plot; that poisonous fluid was injected into him.

J. G——. Was in St. Mary's Hospital for an affection of the heart. Fancied that he should be burned in the hospital; that one of the patients in the same ward was constantly watching him and taking down his words; that others were peering at and listening to him. Slunk into corners, and only spoke in whispers.

C. W——. Entertained exalted ideas of himself and his circumstances. Said he was rich; that he was about to build a fine house; that he should keep a carriage and spirited horses; contract a splendid marriage; that he was raised to the peerage with the title of the Duke of Leeds; that he had direct personal communications with the Almighty.

R. B——. Became epileptic on the failure of some mining speculations. During the occurrence of the fits he fancies he is a stag. Leaps about the room, &c.

J. L——. Was unsuccessful in business. Fretted at this for several weeks; then began to have delusions. Said he saw a coffin in his room; in consequence of which he refused to go to bed; said there were ghosts in the house, and a strong smell of human blood.

J. H——. Suffered from headache, giddiness, failure of memory. Said there was a little man in his head, and that he must cut him out by taking off part of the skull.

O. M'C——. Said he dared not shake hands with anyone; that he was a divine being, just come down from heaven; that he should not remain long upon earth, but must go down to hell to see how things were going on there.

J. W——. Spoke in a religious strain. Said he was commissioned by the Almighty to preach the gospel; that God had appeared to him, and told him that he should convert the world, and should not die before mankind were brought into the fold of Christ.

C. S——. Became affected in mind in consequence of seeing the body of a man suspended to a beam in a house which he was employed to force open. Said that Jesus Christ was coming to whitewash the house, and it must be got ready for him; that the Almighty had given him power to destroy the devil; that Hampton-court Palace belonged to him; and that he had a large sum of money in the bank.

W. G. M——. Came downstairs without his clothing, and said the Almighty had told him to do so. A week after he rushed into the Serpentine with his clothes on and a carpet bag in his hand. Said he saw strangers in the house, and among them a man with a peculiar cap, who was the devil; that he heard voices desiring him to do such and such things; that he was a prophet.

Such are the fantasies of imagination,—the grotesque distortions, the broken lights, reflected by an unbalanced mind.

Hanwell, Nov. 1870.

## COLLOID TUMOUR OF THE ARM.

By CHARLES WILLIAMS, F.R.C.S.,
ASSISTANT-SURGEON, NORFOLK AND NORWICH HOSPITAL.

THE tumour in this case was removed from the arm of a man who was in the first instance admitted into the Norwich Hospital under the care of Mr. Nichols, in the year 1860. At that time he was a strong, healthy farm-labourer, aged fifty-seven; and stated that about twelve months previously he noticed a hard swelling, somewhat larger than a horse-bean, in the left arm. The growth slowly increased in size, and on admission there was seen to exist, at the inner and upper side of the biceps, a prominent tumour, very movable, and simply lying beneath the skin in the cellular tissue. This growth consisted of three distinct tumours. One was on the outer and upper side, the size of a large walnut, flattened in shape, having a smooth surface, though its margin was nodulated; it was of stony hardness, and apparently unconnected with the others. The second, placed on the inner side of the above, was oval in form, very soft, distinctly lobulated, and had a few hard nodules on it; it had the feel of a fatty tumour, and was not smaller than a hen's egg. The third was perfectly hard and movable, and not much larger than a horse-bean.

In December, 1860, these growths were removed. No. 1 was found to be extremely dense, so much so as almost to resist the edge of the knife; it contained no juice, and no cartilage could be detected anywhere about it. Under the microscope, portions of this substance exhibited the fibro-membranous stroma of colloid, having very delicate, curved, and intersecting fibres, interspersed among which were granules of various sizes, and numerous oil-globules. No. 2 tumour was enveloped in a capsule, and composed of amber-coloured material, having the consistence of jelly. The microscope proved it to be comprised of distinct, well-marked loculi, delicate fibres, and a few cells. No. 3 tumour was of the same consistence and appearance as the first. Surrounding these tumours was a substance of a reddish colour, having the semblance of gelatine; this was found to contain the characteristic long, wavy fibres of colloid disease, unaffected by acetic acid.

My friend, Dr. Mackenzie Bacon, of Fulbourn, kindly sent a portion of these growths to Dr. Wilks, whose examination resulted in the opinion that they were a variety of fibrous or fibro-plastic tumour, sometimes recurrent. "Its likeness to colloid gave rise to the name collonema and gelatinous sarcoma by the older surgeons. The structure is very beautiful. I have lately had under my care a case of this kind, in which the tumour sprang from the pons Varolii of a child. The hard portion, though apparently different, is in composition much the same, but the fibres are simpler and more compact. It is desirable to watch for recurrence in such cases."

With regard to the patient, the wound healed slowly,

and, when nearly well, there appeared at its lower part a small growth, of the size of a nut. This was removed, and, on examination, was seen to be a cyst containing glairy fluid, which exhibited the usual reticulated character of colloid. After this the wound healed soundly, and the patient was dismissed in January, 1861.

In March of the present year the man applied a second time for admission into the hospital. The disease had recurred in his left arm, and had assumed very formidable dimensions; it occupied the whole of the anterior and internal aspects of the limb, and measured twelve inches and a half in length, and about twenty inches in circumference. In front of this growth was a smaller one, the size of an orange, hard and nodular, and was the first to make its appearance. Both were freely movable under the skin, to which they were unadherent, except at a spot of ulceration which had been produced by the friction of his clothes against the tumour. There was no enlargement of the

axillary glands. He was in possession of excellent health, and had been so for many years. No member of his family had ever suffered from cancer.

He stated that after leaving the hospital in 1861 he remained free from any recurrence until 1866; he then noticed a small tumour at the lower part of the cicatrix. Nine months before admission another tumour appeared, somewhat higher in the arm; this grew very rapidly, and in that space of time had attained the size indicated above. On the 18th of March Mr. Nichols dissected out the mass, which was found to be lying immediately beneath the skin, having no attachment except to the superficial fascia. The hæmorrhage, chiefly venous, was very free.

When cut into, the tumour had a yellowish colour and translucent gelatinous appearance. The microscope revealed fibres so delicate as to require a very good defining power to discern them. They interlaced in all directions, but sprang in the first place from distinct centres. Oval nuclei were aggregated in clusters amongst the fibre-meshes.

This case, I regret to say, terminated unfavourably thirteen days after the operation. The patient never for one hour rallied after its removal. No suppuration took place. The pulse remained at 100; tongue dry, and a hot skin. Neither rigors nor diarrhœa supervened.

At the post-mortem examination a large quantity of recent lymph and pus were found on the intestines. The pelvis contained a good deal of purulent serum. The omentum and all other organs within the thorax and abdomen were healthy, except the liver, which had a large clot of extravasated blood in its right lobe.

I have not, in accordance with general custom, described this specimen in the title of the paper as "colloid cancer," simply because I believe it to be very doubtful indeed whether there is any connexion at all between true colloid and cancer. So far as I can judge from the few cases that have fallen under my notice in hospital and private practice, and also from those recorded in medical books and journals, I am induced to believe that colloid is a disease quite *sui generis*, and is neither carcinomatous in its character, nor frequently associated with cancer; and when seen in combination with the latter, such occurrence may be explained by the supposition that in all probability colloid disease has appeared in a person having an hereditary tendency to cancer; and it has called into action the growth of this malignant disease much in the same way as the removal of an innocent tumour may be followed some time after by the growth of a cancer not far distant from the cicatrix. In this case the local injury caused by the removal of the non-malignant tumour called into play what was required for the production of a cancerous growth. Is it not a fact that "in persons the subject of cancer, at some period, sooner or later, the thoracic or abdominal viscera, or some organs distant from the seat of the primary development, become invaded with the same disease? On the contrary, in colloid disease, the primary growth being removed, another may reappear over and over again; yet the development is confined in most cases to the immediate site of its first appearance, or to some part of the member to which it grew."*

"Another characteristic of these fibro-plastic growths, and a very marked one, is this—that in all stages of their growth, whether before or after ulceration of the integuments, the lymphatic system is not involved in the disease. In not one case shall we find that the lymphatic glands of an organ in which these tumours were growing had ever become infiltrated on the seat of a similar disease."

We are therefore justified in giving a favourable prognosis in these cases—much more so than if they were the subjects of cancer; and we are also justified in removing growths of this nature wherever they appear, inasmuch as, if the disease be not radically cured, it is slow in its recurrence.

I might refer to notes of other cases of colloid which have fallen under my observation, but must content myself with briefly recording one; that of a lady in this city, from whose right breast Mr. Nichols removed a small hard tumour. It was the size of a walnut, and contained material of the consistence of liquid glue, having the characteristic appearances of colloid when examined under the microscope. Exactly two years later, I again assisted in the removal of a small elastic growth lying close to the axillary end of the cicatrix. The tumour proved to be a cyst containing colloid fluid. Five years later the disease had recurred in the form of a considerable tumour under the cicatrix. On examination after removal, it was found to consist of a large single cyst, having a thick, smooth, shining wall, and containing thin gelatinous matter. The lady is still living, and, I believe, in good health. It is now nine years since the first appearance of her disease.

We must admit that there existed, in these two cases, no feature common to the natural history of a cancer. Had such been the case, in neither would so long a lease of life been granted.

Colloid disease is by no means common. It is, indeed, of somewhat rare occurrence. Cancer, on the contrary, is very common. The statistics of any hospital would prove this. At the Norfolk and Norwich Hospital I noticed in two years only 6 cases of the former to 148 of the latter.

Norwich, Nov. 1870.

* Birkett, Guy's Hospital Reports, vol. iv.

---

CHOLERA IN SOUTHERN RUSSIA.—Cholera having ceased at all the Russian ports of the Black Sea and Azof, the Constantinople Board of Health has suppressed the quarantine on arrivals from those ports with the exception of Poti. A medical inspection will, however, be required before admitting vessels coming from them to free pratique. The arrivals from Poti are excepted, in consequence of the frequent communication between it and the interior of the country, where cholera still prevails.—*Malta Times.*

# CARDIAC IRREGULARITY.

BY J. MILNER FOTHERGILL, M.D.,
SENIOR RESIDENT MEDICAL OFFICER, LEEDS PUBLIC DISPENSARY.

(*Concluded from page* 812.)

WE can now proceed to consider at length the causes under the heading *B*.

*B*. Disturbance of balance betwixt distension and the irritability of the organic ganglia + the action of the vagus.*

Thus, when ventricular contraction ceases, from any cause, to be normally complete, a certain amount of blood is already in the flaccid ventricle, into which the gorged auricle and veins behind are ready to pour their contents. The ventricle is soon full, and, goaded to action, the muscular fibres contract, perhaps only to the extent of their over-distension. Like a bladder behind an enlarged prostate, or a stricture, the contraction is only to the extent of the over-distension—no farther. Goaded, the fibres must contract, and purchase momentary relief. The irritation of over-distension overcomes the restraining action of the vagus. Soon full, the ventricle soon contracts, and a rapid, feeble, unsustained pulse ensues. In the midst of this come one or two irregular beats. The wearied muscular fibres claim, every now and again, and often very rhythmically, a longer diastole, and fatigue asserts itself in a longer sleep, however the irritant may goad. The heart's brief, fitful sleep has its longer and shorter periods of rest, according to its necessities, as has the organism under weariness. The heart's short period of rest is the diastole; its sleep, therefore, consists of very brief snatches. And not only is this undesirable in the excess of labour thus thrown on the muscular walls, but it is a condition which tends to perpetuate itself, when distension becomes great and contraction incomplete. The amount of time, too, which is taken off from the heart's period of rest in the twenty-four hours by increased activity is much more than is commonly supposed. Thus, if we divide a second into three sections, one covering the systole and two the diastole—a proportion which is not far from the exact condition,—we have 180 sections in a minute. With a rate of pulsation of 60 per minute, we have 20 seconds of contraction and 40 seconds of rest; but if increased to 81, we have 21 beats, or 7 seconds, taken off the time of rest—that is, the diastole must be shortened, and 81 diastoles must take place in 33 seconds. Instead of 30 diastoles in 40 seconds, we have 81 in 33; or, in other words, each diastole, instead of lasting two-thirds of a second, lasts less than half a second in time: the diastole and systole are approaching each other in duration. In twenty-four hours the increase even amounts to something considerable: seven minutes per hour gives two hours and forty-eight minutes less rest for the heart in twenty-four hours.† The heart's period of rest, even in this small increase, is diminished one-fifth. While at the same time the imperfect ventricular contraction, imperfectly distending the aorta, elicits only an imperfect recoil—the propelling power through the coronary arteries; and this reduced coronary circulation affords but imperfect nutrition. There are then aggregated the most powerful factors for imperfect repair—namely, increased labour, decrease of time of rest, and defective blood-supply. There is not a single morsel of spare power for the induction of compensatory hypertrophy except in organisms of high vitality. The irregularity, the evidence of inability, is a serious symptom, but not one whit too serious for the circumstances it indicates; and, sooner or later, on this acknowledged inability will be planted the result of imperfect nutrition—viz., a degenerate condition of the muscular fibre, still further inability, and ultimate cessation in diastole. Where the question lies so as to affect the balance of power with which the muscular fibre is associated and its relation to its function, this condition is of serious import; and it becomes of high importance, not only to the patient, but to the physician, as affecting his prognosis, to distinguish these acknowledgments of inability, these truly adynamic conditions, from those disturbances of balance and rhythm which are comprised under the following section.

*C*. Disturbances of balance betwixt the organic ganglia and the inhibitory or controlling action of the vagus.

Nerve force can only manifest itself in muscular action, and the disturbances of the balance existing betwixt the sympathetic ganglia and the inhibitory fibres of the pneumogastric can only be manifested through the muscular fibres under their control. As stated above, the fibres of the vagus have a restraining action, and hold back the contraction of the layers of muscular fibres until one harmonious contraction can be ensured. Any excitation of the vagus will, then, restrain the ventricular systole, though the muscular walls may be perfectly equal to their function and in nowise incapable. Thus, by galvanising the vagus the systole may be retarded several beats, or even permanently. Aconite and other drugs which lower the susceptibility of the cardiac ganglia to impressions, produce irregularity. No longer so sensitive to the impressions of distension, a stronger stimulus is requisite to excite contraction. Any force which exhausts the sympathetic system will lower the susceptibility of the cardiac ganglia, and will produce disturbance of balance and its inevitable results—the manifestations thereof. So, when, from exhaustion, the stored-up nerve force of the sympathetic is drawn upon too heavily, we have manifestations in the working of the organs supplied by the splanchnic in the shape of disordered action; and this, for obvious reasons, is most common in the ever-acting heart. Thus, after a heavy day's exertion in the hay-field the writer's pulse intermitted even, and a very disagreeable sensation was experienced during the period of retarded contraction. A night's rest, by permitting the organic nervous system to recover itself, restored the normal balance, and the irregularity was gone. So after an indigestible meal, when a great portion of the organic nerve force is drawn off to the stomach and its labours, and thus the cardiac ganglia are insufficiently supplied, there follow a disturbance of balance and alterations of rhythm. This often happens to the writer when induced or necessitated to make a dinner of veal pie. Irregularity of the heart's rhythm after a debauch is a common phenomenon, and is consequent upon the exhaustion of the sympathetic by repeated applications of stimuli. This often leads to temporary dilatation, or cardiac engorgement, with rapid, feeble pulse, imperfect supply of blood to the brain, and delirium tremens. In this condition the administration of an agent which notably produces more perfect ventricular contraction, and thus a more perfect supply of blood to the brain, produces the most decided relief. This explains why some cases of delirium tremens yield to digitalis like magic, while others are in nowise relieved. Every man who has unfortunately allowed himself too much wine at dinner will remember how he could keep himself pretty comfortable next day until he had dined again, and then he was miserable unless he once more resorted freely to stimulants. The organic nerve force, only just up to the mark all day, is severely taxed by the demand made by the stomach, and then the depression; and this condition is not uncommonly accompanied by cardiac irregularity.

Dr. B. W. Richardson has said all on constitutional irregularity that the present knowledge of the subject will permit; and certainly some individuals have a naturally irregular and even intermittent pulse, so much so as even to become regular in illness only. This consists in a want of balance betwixt the opposing nerve forces; the subtle arrangement usually attained is not quite reached in these cases, but we have yet to learn that the individual is by the want of it in any way much injured. As to its value as evidence of insidious cerebral mischief, Dr. Richardson has left nothing to be said; but I cannot agree with him in confining intermittency or irregularity—for he does not

* It is unnecessary to carry the reader again over the ground of distension being the force which excites the heart fibres to contract; the contraction taking its rise in the impressions produced by the distension on the cardiac ganglia, whose sensitiveness to impressions produces the regular contraction after a certain distension. Thus, in spite of the controlling action of the vagus, when blood is poured more rapidly into the heart, as in muscular exertion, the contractions are more rapid, but not feebler till exhaustion is attained.

† The question of the extent to which an increased number of systoles per minute infringes on the time of rest by shortening each diastole is a rather difficult one. It is obvious that in very high rates, as 160 to 180, each systole cannot be one-third of a second, as there would then be no time whatever left for diastoles. Still the broad question of the increasing number of contractions per minute diminishing the aggregate time of the diastoles is plain enough. A glance at two sphygmographic tracings of 60 and 120 pulsations per minute would render evident what it is scarcely possible by words to demonstrate clearly.

clearly define the distinction—to this class of disturbances of balance.

*The diagnostic value of cardiac irregularity* cannot be said to be a subject without its difficulties. It is a complex question; and though usually significant of a disturbance of balance of power betwixt the opposition of the blood to be driven and the heart's power to drive it, it may be merely evidence of disturbance in the balance existing betwixt the opposing nerve forces. How, then, is its connexion to be determined and its importance weighed? Only by a careful estimate of its surroundings. If temporary in its character, it matters little whether it is the result of muscular inability or splanchnic exhaustion; as in the irregularity of acute asthenic disease in the latter stage it is a serious evidence of vital adynamy, but as a temporary condition it usually passes away with the causes which gave it birth. If temporary, it may fairly be regarded as transient with the conditions on which it depends. Thus it will now and again put the physician on the track of some secret debauch; and when so originating, it as soon vanishes as when occasioned by other transient cause. When persistent, however, and without a history which would account for its temporary presence, it becomes no simple question, and presents many difficulties. It is then even connected only with either loss of power in the ventricle, whatever the cause, or disturbance of balance of nerve forces: one of the two it must be. And, firstly, as to its relative frequency: as connected with disturbance of nerve balance it must be rare, as in the writer's experience it is comparatively unknown. The *à priori* probability is enormously in favour of its being connected with muscular failure. If purely nervous, it will want the objective and subjective symptoms of cardiac inability. There will be want of increased dulness; no impairment of first sound or apex beat; no congestion of organs behind; no diminution in the bulk of urine; no loss of capacity for exertion; no difficulty in breathing. Both rational symptoms and physical signs are wanting. These witnesses will settle every case, except that of implantation of serious cardiac change in an individual with this natural want of rhythm; and such a case must necessarily be rare. Cardiac irregularity may be due, however, to causes implicating the right ventricle only. In the distension of the right ventricle in acute disease of the respiratory organs and in acute asthenic disease we find the irregularity solely due to trouble in the right ventricle. There is no opposition to the free flow of blood from the left ventricle, which is closing on a small quantity of blood passed in from the pulmonary veins; and thus the small radial pulse is only indicative of the state of the right side of the heart. There is a strong impulse towards the ensiform cartilage, increased dulness towards the right side of the sternum, and accentuated second sound over the pulmonary valves,—all indicative of right ventricular labour. The fibres being in many instances common to both ventricles, the left side necessarily keeps time with the right. In some cases a distinct irregularity connected with failure of power in the right ventricle can be detected on auscultation, which is not sufficiently pronounced to be felt in the radial pulse. In these cases there is usually evidence of old-standing disease in the respiratory organs and right ventricle; in rarer cases of acute disease it is probably due to the right ventricle being partially paralysed by the excess of carbonic acid in contact with the endocardium.

Finally, cardiac irregularity is evidence of disturbance of balance of power from failure of one of the opposing forces. Very generally this failure lies in the muscular walls, and then it becomes a serious symptom, especially in adynamic conditions. In importance and significance, it lies midway betwixt successful effort (laboriousness)—that is, palpitation—and the more serious admission of incapacity, intermission, loss of an entire beat; and it is frequently found associated with both.

The subjoined chart will give a bird's-eye view of the subject, and is thus preferable to a mere *résumé*.

**Cardiac Irregularity is due to Disturbance of Balances in—**

1. **Vis Inertiæ of Blood = Muscular power.**
   - Increase in the vis inertiæ by { Arterial obstruction. / Altered chemical characters.
   - Loss of muscular power. { Loss of integrity from degeneration. { Acute, in fevers. / Chronic, as from atheroma. } Exudation into substance. / Altered nutrition from altered blood. (*Jenner.*)
   - Excessive distension, from temporary action of causes above.
   - Imperfect distension—as in severe hæmorrhage,—from want of blood to distend the chamber walls.
2. **Distension = Irritability of cardiac ganglia + controlling action of vagus.**
   - Exhaustion of sympathetic,—from fatigue, debauch, withdrawal of nerve-force for purposes of digestion, &c.
   - Chronic cerebral disease, &c.—(*Richardson.*)
   - Constitutional peculiarity. Transient mental conditions.—(*Richardson.*)
   - Tumour of vagus.—(*Romberg.*)
   - Action of cardiac neurotics: { Exciting the cardiac ganglia,—as digitalis, belladonna, &c. / Paralysing the cardiac ganglia or exciting vagus,— } as aconite, Calabar bean, &c.
3. **Cardiac Ganglia = Controlling action of the vagus.**

A CASE OF

# PREGNANCY AND LABOUR COMPLICATED WITH PARAPLEGIA.

BY W. H. BORHAM, L.R.C.P.E. & M.R.C.S.E.

THE sciences of medicine, surgery, and midwifery can never approximate to exactness. New events are constantly occurring in the various forms of diseases. The very character of some diseases assumes different phases in a cycle of years; and the *modus operandi* of the various pharmaceutical remedies tends to make the science of medicine less exact. With surgery we are equally at war with exactness. For instance, two similar falls of equal force, from the same height, with the same amount of velocity, and both parties alighting in positions alike on the ground, will produce accidents varied in character: one will suffer from compression of the brain, and the other receive fractured spine or ribs. The treatment varies for such surgical cases, and must be met according to the exigencies of the case and their individual features. Books cannot teach the appropriate treatment of every case. But I believe it to be in the power of every medical man, however humble may be his practice or his ability, to add something to the general stock of professional knowledge to make up for this want of exactness. Cases must crop up in the general routine of practice of such a class as to convince us of the rarity of their nature; and the least the science of our profession can expect of us is a short report of such cases, so that others may form an opinion on a matter which might be likely to occur to them in their professional career.

The following case, epitomised with brevity for the sake of space, possesses features of great interest and rarity:—

In September, 1868, Mrs. R——, aged thirty, the wife of a small farmer, was six months advanced in pregnancy with her second child. She complained of pain in her back and loins and down the thighs, and she limped in walking. A month later she was taken suddenly with total paralysis of both legs, and complete loss of feeling from the toes to the lumbar region followed. The uterus, bladder, and rectum joined in this unfortunate condition, involuntary secretions emanating from these organs. In the beginning of November a large sloughing phagedænic wound made its appearance over the sacrum, connecting itself by small channels with the spinal marrow. On the 10th of this month the full term of utero-gestation was considered to be accomplished, and no indication of pains appeared; but offensive discharges now came from the womb in abundance, and purulent absorption was fast threatening. On the 12th I

ascertained that the os was relaxed, powerless, and lifeless; it yielded almost as putty would to the touch, pitting like the skin of anasarca does to the pressure of the finger's tip. The patient could not feel my manipulations, and I introduced my hand gradually into the uterus (little force was necessary), and grasped the feet of the child, turned, and delivered the woman at once of a putrid child. Version, usually an operation of a sensitive nature to the patient, was accomplished without the mother being aware that I even touched her. She gradually sank, and died on the 20th, eight days after delivery; and during this time the wound in the back rapidly increased till it attained the large size of a dinner plate. No secretion of milk or other symptoms of a newly made mother came on after delivery.

Many features of interest will be suggested by this case. The woman in the early period of pregnancy was quite well, and received no fall or harsh treatment. She was comfortably nourished, and well to do. What caused such sudden disease of the spine and loss of power? Could pregnancy in any way? If so, where would be the sympathetic channel from the uterus to the sacrum?—and what would be the structures traversed? The uterus and spine must have been in a normal condition when conception occurred. When and by what powers were these normal structures made unhealthy? The sympathy between the breasts and uterus was completely severed. Where was the point, and what were the structures involved? In October, when paralysis of the mother's uterus set in, the *movements* of the child stopped synchronously. Still life went on for some weeks, as I detected the fœtal heart pulsating. Did the mother's paralytic blood, by passing through the fœtal circulation, cause the child's *movements* to cease? If so, how did the blood affect the child's spine? I could not say exactly the precise date that nutrition ceased on the part of the child, as the loss of vitality was so gradual, the first real indication of its death being the putrid discharges from the uterus. Why was not the child nourished up to its full term, as the mother's circulation was tolerably good up to the birth of the child? I confess many of the answers must be mere guesswork.

Some medical men have told me that they have attended every class of difficult labours; perhaps they will explain the abnormal conditions in the above case. But I must confess, after attending some thousands of cases, I still find the science of midwifery is not exact.

Halstead, Essex, Nov. 1870.

# A Mirror
## OF THE PRACTICE OF
# MEDICINE AND SURGERY
## IN THE
# HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## ST. BARTHOLOMEW'S HOSPITAL.

### CASES UNDER THE CARE OF MR. PAGET.

*Clinical Remarks on Residual Abscess.*—On the 10th instant Mr. Paget operated on a girl who presented the novel feature of a residue of obsolete pus in a cavity in the lower end of the tibia. On her admission, rather more than a year ago, with acute necrosis of the tibia, a long incision was made in the line of the bone, and a quantity of pus liberated from between it and the periosteum. Later, an attempt was made to take away the necrosed portion of the bone, but it was found to be too firmly fixed. In August last, however, Mr. Callender, in Mr. Paget's absence, succeeded in removing a large portion of the middle and upper thirds of the shaft. The wound healed well, but there still remained at the lower end of the limb one or two small openings leading down to some more dead bone, with a view to remove which Mr. Paget performed the operation in question. His incision disclosed one or two small sequestra, and the large cavity in the lower end of the shaft of the tibia which contained them was filled with thick mortar-like substance consisting of half-dried obsolete pus.

In remarking on this case, Mr. Paget explained that such cavities in bone usually become filled with a soft and vascular fibrous structure; but that, as in the case of abscesses elsewhere, the contained pus may, on the other hand, remain behind, and dry up into the inspissated substance called "obsolete pus," leaving the patient liable to a return of acute inflammation of the part, resulting in what he calls "residual abscess." In the present instance, for example, had not the small remaining portions of necrosed bone led to the exploratory operation, the patient's limb would in all probability have healed with every outward sign of perfect health, but yet enclosing a substance which, perhaps soon, perhaps after a term of years, would, under the influence of a decline in general health or some other exciting cause, have lit up acute inflammation, and produced another abscess. As an illustration of this process, Mr. Paget referred to a patient whose case had already been mentioned elsewhere, but on whom a post-mortem examination has since been made. Twenty-four years before his death the patient was believed to have an abscess in the left iliac region, of which he was near dying. It was supposed by the two eminent medical men who attended him to have occurred in connexion with disease of the cæcum. He remained in fair health for twenty years, and then, two years before death, another abscess appeared below the crural arch and in the loin. It was opened successively in both these places. When the patient at length died exhausted by the profuse purulent discharge which it maintained, the evidence of the post-mortem examination went to show that the first abscess had been caused by disease of the lumbar vertebræ, and that the second had been a residual abscess, formed about the remnants of the old disease.

*Ligature of the Femoral Artery.*—In the following case, for the notes of which we are indebted to the house-surgeon, Mr. Young, the wound healed perfectly well over the carbolised ligature which was applied to the artery, and the subsequent superficial suppuration appears to have occurred in connexion with the inflammation of the saphena vein.

G. B——, aged sixty-seven, was admitted on Nov. 1st, with a large pulsating tumour, of six weeks' standing, in the right popliteal space. A distinct bruit was audible.

On Nov. 5th Mr. Paget tied the femoral artery in Scarpa's triangle with a carbolised catgut ligature, the ends of which were cut off short. After the wound had been well washed out with carbolic acid lotion (one part to twenty), it was closed with silver sutures, and covered with two layers of lint soaked in carbolic oil (one part to five). The patient was put to bed with the limb wrapped in cotton wool, and lightly bandaged, and a hot-water bottle to the feet.

Nov. 6th.—Pulse 72; temperature 98° F. Feet warm; no pain; has slept well.

7th.—Pulse 72; temperature 98·5° F. The outer dressing removed to soak the inner one with carbolic oil. It was then replaced, and the whole covered with gutta-percha tissue.

8th to 14th.—Temperature and pulse normal; has had slight tinglings in foot; aneurismal tumour is becoming small and consolidated. The patient is progressing favourably in every respect.

15th.—Enlarged and painful glands observed in inguinal region; the sutures removed; wound perfectly healed.

21st.—Pulse 94; temperature 101·8°; some pain and inflammatory thickening along the course of the saphena vein; superficial suppuration of wound; a linseed-meal poultice to be applied.

23rd.—Pulse 72; temperature 98°; tenderness in the course of the saphena diminishing, the thickening less; there remains some slight suppuration of the wound.

25th.—Pulse 72; temperature 98·8°; the wound is almost healed; water dressing applied.

Dec. 2nd.—Nitrate of silver applied to exuberant granulations of the wound; the patient allowed to get up.

12th.—The wound healed; the tumour small and hard, with no tenderness; a little thickening on the inner side of the wound; general health good.

## ST. MARY'S HOSPITAL.

### A CASE OF ASCITES SUCCESSFULLY TREATED BY OIL OF COPAIBA.

(Under the care of Dr. SIEVEKING.)

WILLIAM H——, aged forty-five, a coachman, was admitted on the 12th of August. He stated that nine weeks previously he had had an attack of diarrhœa, which was soon checked by medicine; but a week later he felt pain in the abdomen, especially over the region of the spleen, and shortly afterwards noticed that his abdomen began to enlarge. The pain and swelling gradually increased until admission. He was then in intense pain; the abdomen was greatly distended, shining, and dull on percussion; the superficial veins congested; the skin hot and dry; the tongue furred; the pulse 94; the urine scanty, never more than 15 oz. being passed a day, high-coloured, but not albuminous. Mercurials, salines with iodide of potassium, iron, and an occasional opiate, together with the application of leeches, poultices, and blisters, were tried for a considerable time; and although the treatment relieved the pain, it did not diminish the effusion, which, on the contrary, seemed to increase, the abdomen measuring 39 in. round the umbilicus.

On the 12th of October the patient was much worse, the lungs becoming implicated, as indicated by pain, dyspnœa, cough, and dulness on percussion. He was ordered to take ten minims each of oil of copaiba and liquor potassæ, in an ounce of camphor mixture, three times a day.

14th.—Dyspnœa less, abdomen softer, and urine more abundant.

16th.—No dyspnœa. Measurement at umbilicus, 37 in. Amount of urine passed during the last twenty-four hours, 30 ounces. To take twenty, instead of ten, minims of oil of copaiba in each dose of the mixture.

18th.—Has been obliged to leave off the mixture, owing to its making him sick. Feels rather fuller in the abdomen.

20th.—Resumed the copaiba mixture.

21st.—Much better; measures round umbilicus, 35½ in. Amount of urine passed during the twenty-four hours, 50 oz.

25th.—Measures at umbilicus, 34 in. Urine passed yesterday, 32 ounces.

From that time he continued to improve, the thoracic symptoms disappearing, and the size of the abdomen decreasing.

On Nov. 3rd he measured 33 inches, and on the 11th, 32 inches, and was ordered to leave off the copaiba mixture, and to take an ounce of iron-and-quinine mixture twice a day.

On November the 18th he only suffered from weakness, and on the 24th he was discharged quite well.

## HOSPITAL FOR SICK CHILDREN.

### LITHOTOMY IN GIRLS.

THE following is the fourth instance in which the operation of lithotomy has been performed on the female subject at this hospital; it is gathered from the notes of Dr. Stephen, registrar to the hospital. The other three cases, of which we give below a short review, were under the care of Mr. Thomas Smith.

*Case under the care of* Mr. MARSH. — The patient was a girl three years of age, and on admission was found to be well nourished. She passed urine frequently, and complained of pain in so doing, and was observed frequently to rub the external genitals. On the introduction of a sound, a stone of apparently large size was detected; it could also be felt from the rectum. No deviation from perfect health had been observed in the child till a year previously; her micturition then began to become frequent and painful, and latterly these symptoms were much more marked, and she had contracted the habit of rubbing the private parts. During the last four months she had had prolapsus ani. Her urine was described as being thick, and at night was passed in bed.

The patient having been placed under chloroform, a staff was introduced by the urethra, and the vagina being dilated by means of a Sims' speculum, the posterior half of the urethra was divided with a small tenotomy knife. The stone was then seized with a pair of polypus forceps and brought into view, but it was found necessary to enlarge the opening slightly on either side before it could be extracted, although its smaller diameter was presented to the opening; it was found to be about an inch and a half long, and about half an inch in the transverse diameter. For a few hours after the operation the urine was bloody, and a few clots were passed; the pulse was 144°. Two days after the operation the patient was reported to have slept well each night, and to have taken her food with good appetite; her temperature was 98·6°; the urine, which she passed in bed, was quite clear.

*Cases under the care of* Mr. THOMAS SMITH.—The first was operated on in October, 1864. The patient was thin, pale, and haggard. For twelve months she had suffered pain during micturition; she passed water frequently; it was free from blood. For five months previously she had had prolapsus ani. In this case the stone was about two and a half inches in length. It could be plainly felt from the rectum, and appeared to completely fill the cavity of the bladder at the time of the operation; the perineum becoming very tense during the extraction, the vaginal orifice was slightly enlarged at the fourchette, and, as the posterior wall of the bladder was drawn forwards with the stone, a further incision was carried from the orifice of the urethra, about half an inch towards the os uteri. Two silver sutures were inserted, one through the perineal incision, another through the vesical. The stone was extracted between them, and then they were tightened so as to close the incisions. A portion of the stone adhered to the fundus of the bladder, and was separated with some difficulty. No bad symptoms followed the operation. Eight days afterwards the patient could hold her water for more than half an hour. On the sixteenth day she could retain it for an hour, and the sutures were withdrawn. Three months later the child returned with a vesico-vaginal fistula, of which the edge were pared and brought together on two occasions, and in two months more she was discharged well.

The second case was operated on in April, 1865. The patient was five years old. For six months she had cried at every effort at micturition, and was in the habit of pressing her hand to the parts. Incisions were made in the urethra and in the fourchette. The stone was phosphatic, and weighed two drachms and a half, and was withdrawn without injury to the hymen. In a week's time the child had recovered complete control over the bladder, and, before another week, was discharged well.

The third case was admitted in May, 1869. The child was ten years old, and was well nourished. For two years she had complained of pain during micturition, and had been in the habit of pressing the hand to the perineum while voiding urine. The stream was sometimes full, sometimes a dribble, and sometimes stopped altogether for a time. The urine was sometimes offensive, always thick, but had never contained blood. The stone lay against the posterior wall of the bladder, and could be felt from the rectum. An incision was made in the fourchette, and another, against a grooved staff, through the anterior wall of the vagina, behind the urethra. Four sutures were passed into the vaginal, and three into the perineal, wound. The perineal sutures were removed on the tenth day, the vesico-vaginal sutures on the seventeenth; union was complete, and scarcely a trace of the incision remained.

# Medical Societies.

## PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 6TH, 1870.

DR. QUAIN, PRESIDENT, IN THE CHAIR.

### DR. LIEBREICH'S OPHTHALMOSCOPIC DEMONSTRATIONS.

AT this meeting Dr. LIEBREICH gave a number of ophthalmoscopic demonstrations of diseases of the eye. He said:—I present to you an exceedingly interesting case of a congenital anomaly which is very rare. It is a persistent hyaloid artery and vein. I have never seen so fine a specimen. Arising from the artery of the optic disc is a little

branch, which runs in nearly a straight line into the vitreous humour. It soon terminates in a loop, which seems to make a direct transit from the artery to the vein; and the latter returns to the papilla by intertwining itself obliquely with the artery three times. It terminates in the central vein in a point which it is not easy to observe, because it is situated in the fundus of the physiological excavation of the optic disc. In order to enable you to recognise the direction of these little vessels, it suffices to make a slight lateral movement of the objective of the instrument, or of the eye under observation. During this experiment, you will see the vessels of the vitreous humour making an apparent movement in displacing themselves before the optic disc, and more strongly with the anterior end. This observation of parallax is very easy in this case on account of the relatively great distance between the anterior and posterior end; but I have recommended this same movement as an excellent means of diagnosing the slightest difference of depth. The change most frequently observed with the ophthalmoscope is the posterior staphyloma occasioning short-sightedness, by the lengthening of the antero-posterior axis; it is characterised ophthalmoscopically by choroidal atrophy about the posterior pole of the eyeball, and at the circumference of the optic disc. You will observe at the margin of the nerve a white crescent, within the limits of which the sclerotic appears quite denuded, which is due to the complete atrophy of the choroid at this point. In the patient with choroiditis disseminata you will be able to make almost microscopical observation on the state of the cells of the choroid. In some these cells are atrophied, and small more or less light spots are visible. The darker patches, on the contrary, are formed by the altered epithelial cells of the choroid. As the latter become darker, each cell is isolated like a little black point. It is important not to confound this disease with retinitis pigmentosa. The black spots in the latter are found in the retina itself, and you recognise them by the manner in which some of these black lines accompany the vessels of the retina where they cross the pigmentary zone which surrounds the optic nerve. This affection, which I found, almost ten years ago, to be, in nearly half of the cases, the result of marriages of consanguinity, is generally developed in early childhood. The greater part of the affections of the retina and of the optic nerve are, on account of their relation to the different affections of the heart, kidneys, brain, and spinal cord, of great interest to all physicians who do not confine themselves specially to ophthalmology. It was difficult to find cases in illustration, but Dr. Jackson has sent me a very fine case of neuritis optica. You will see the optic disc completely changed. Its colour has disappeared, the substance of the papilla has become opaque and so thickened that it forms a prominence, the surface of which is indicated by the course of the veins, which, on account of the impediment to the circulation, are become swollen and tortuous, while the arteries are so thin that one has a difficulty in finding them. You will be struck by the great difference in the aspect of the optic disc between this case and cases of atrophy of the nerve and of glaucomatous excavation of the papilla, of which we have a fine specimen for examination.

Dr. MCCORMACK exhibited a number of specimens of Gunshot Injuries of Bones and Joints, which he had brought with him from Sedan; and he drew the conclusion that conservative surgery had very little chance of success in immediate relation to the battle-field. He thought that primary amputations and the like gave much greater chance of success than resections, and measures adopted with the view of saving badly-injured limbs.

Mr. TROTTER was glad to find the impression he had derived from his Crimean experience confirmed by Dr. McCormack.

Mr. HULKE said that whilst he did not deny that in the present Franco-Prussian war conservative surgery had little chance of success, yet he believed that every campaign ought to be treated on its own merits. In some it might often be practised with success. In the Crimean campaign it was no doubt unavailable on account of the existence of so much scurvy and deterioration of health amongst the soldiers. But in the present war, and in the last German campaign against Austria, conservative surgery ought to have had a better chance. He did not think it right to repudiate conservative surgery in military practice altogether.

Mr. JOHN FOSTER showed for Dr. Thompson, of Nottingham, a Tumour weighing ten pounds, and measuring 27½ in. by 22 in., removed from the breast of a married woman. The growth began, thirty-six years before, as a small swelling. It remained stationary during the catamenial period of life, and then became painful, and rapidly enlarged. The glands were unaffected.

Mr. HENRY ARNOTT showed specimens of Secondary Epithelial Cancer in the Lungs, the Heart, and the Breast. One case commenced as epithelioma of the clitoris, the inguinal glands then becoming involved, and presently the lungs and the breast. In another the disease began in the face, and involved the lungs secondarily; and, in a third, the face was first involved, and the sternal region secondarily.

Dr. MOXON asked if there was any direct relation between the disease of the face and the lungs in any of the cases of such a kind as to lead to the supposition that the cancer elements had descended from the face to the lungs, and there grown.

Mr. ARNOTT thought so in some of the cases.

Mr. TROTTER exhibited a specimen of Cancerous Disease of the Lung, which had given rise to a condition simulating phthisis during life, and conjoined to cancer of the kidney, of which no evidence was given during life.

Mr. HEATH exhibited a Fibro-cystic Tumour of considerable size, of twelve years' growth, which was removed from the axilla of a woman, aged forty-nine. It was thought to be fixed to the scapula, but this was not the case. It had got under the serratus magnus, which accounted for the supposition that the scapula was fixed to it, as the two were movable together.

Mr. HEATH also showed a specimen of Procidentia Uteri with an enlarged Ovarian Cyst, from a woman aged thirty-nine. The procidentia dated nineteen years back, and its extent may be judged from the fact that the sound passed to the extent of five inches and a half. With difficulty the uterus was returned, and the usual operation was performed. Perfect union took place, but the urine became purulent, and the woman sank and died. Both kidneys were diseased.

Mr. HEATH also exhibited a Lipoma of the nose.

Mr. SQUIRE showed a specimen of Enlarged Spleen, taken from the body of a gentleman, aged forty; and in reply to Mr. Spencer Wells said that there would have been no difficulty in removing it, and readily securing the vessels, had an operation of the kind been attempted.

Dr. TILBURY FOX exhibited three specimens of Keloid Tumours, sent him by Dr. Anderson, of Jamaica, which had grown from the tubules of ears pierced for ear-rings. These outgrowths are common in Jamaica, and come under the category of traumatic keloids.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, DEC. 9TH.

MR. PAGET, PRESIDENT, IN THE CHAIR.

SIR HENRY THOMPSON exhibited a patient on whom an operation had been successfully performed for the loss of a large portion of the urethra. The man had been the subject of large extravasation of urine, distending the scrotum and rising above the pubes, whence it was evacuated by free incisions. The resulting sloughing destroyed the skin of the penis and a full inch of the urethra just anterior to the scrotum. When the neighbouring parts were sound, Sir Henry, having introduced a grooved staff into the bladder, opened the urethra in the perineum, and passed a gum elastic catheter through the wound into the bladder, and retained it permanently. He then broadly pared the margin of the wound, dissected a large flap from the side of the scrotum, and placed it in good apposition upon the raw surfaces, attaching it with silk sutures, and covering in completely the urethral wound. All the urine now flowed by catheter into a vessel, and in a few days firm union had taken place except at one small spot. The catheter was changed in a fortnight, and the second one was retained for five weeks. On removing this the perineal wound speedily closed, and a No. 8 catheter could be passed through the entire urethra into the bladder. The patient had since learned to do this for himself. There now remained only a very small orifice, which could be readily closed by galvanic wire, or by some small plastic operation.

Sir Henry dwelt upon the importance of a constant free evacuation of the urine in these cases, so as to bring about a state of quietude to the diseased passages; and for this purpose he was in the habit of insisting upon the patient acquiring for himself the habit of drawing off his water by catheter. The great bar to success, he thought, had almost invariably been the presence of urine percolating, at every act of micturition, between the fresh surfaces newly adjusted by the surgeon. The procedure adopted in the present case had been adopted on two occasions in France, by Ségalas and Ricord.

Mr. CHRISTOPHER HEATH commenced the discussion by observing that the chief point of the operation was the great breadth of surface laid bare, and that this was doubtless a great element of success, for another good urethra had been formed simply of skin tissue, so that some sort of mucous tissue must have been formed.

Mr. HENRY LEE said that it was worthy of observation that skin is convertible into mucous tissue, and *vice versâ*, so that the one forms in some way a substitute for the other.

Mr. HEATH remarked that in that case the deep surface of the skin was exposed.

Mr. LEE said that a certain amount of contraction always takes place at the edges of the skin, that being also the case in all cicatrices.

Sir H. THOMPSON, in replying, subscribed to the pertinent remarks of Mr. Heath, and believed that the surface exposed was probably an inch, that a large adaptation of surface was the best means of securing success, and that the raw surface should come close to the roof of the canal, so that pouches may not be left, and cause breakings-out afterwards.

Mr. T. SMITH read a paper "On the so-called Congenital Tumour or Induration of the Sterno-Mastoid." This had been surmised to be an adventitious growth by some, and a syphilitic deposit by others. Its real nature had never been determined, so far as he was aware, by post-mortem examination. The supposed explanations Mr. Smith had reason to believe incorrect; and he thought the induration was probably due to rupture, either partial or complete, of the fibres of the sterno-mastoid, giving rise to effusion of blood within the sheath of the muscle, and to retraction of the torn fibres. Such rupture he referred to injury during parturition, especially when this was complicated by version and extraction.

Mr. TEEVAN said that these cases were interesting, as so little was known about them. He cited Casper, believed that the tumour was due to muscular contraction in utero, and had seen two cases, in both of which, in a month or two, the tumour had entirely disappeared.

A paper by Dr. HANDFIELD JONES, entitled "A Query as to the safety of Subcutaneous Injections," was read by the Secretary. Three cases were described in which the injection of small doses of morphia or opium ($\frac{1}{3}$ gr. of morphia in the first case, 5 minims of liquor opii in the second, and $\frac{1}{4}$ gr. of morphia in the third) had been followed by more or less serious fainting. Reference was made to published cases of serious symptoms following subcutaneous injections of morphia. He suggested the subject as one upon which the Clinical Society might usefully bring their experience to bear, especially with the view of discovering whether there were any objective signs of the state in which opium was not tolerated, and whether such a state might exist at one time and not at another. He thought it very desirable to ascertain whether morbid changes in the valves or muscular tissue of the heart increased the liability to the occurrence of syncope, or whether this was chiefly dependent, as chloroform-syncope seems to be, on some latent infirmity of the cardiac nervous centres.

Dr. SOUTHEY cited an instance in which death had followed the injection of a sixth of a grain of morphia, and made some remarks, the pith of which was that such injections were dangerous in cases of advanced heart disease.

Dr. CHARLES HUNTER, speaking from an experience of about 2000 cases annually, saw no risk in the system of hypodermic injection, whether there was evidence of heart disease or not. Care should be used at the first injection, and the state of the kidneys should be looked to. It was possible that tetanus might result from puncturing a nerve, but he had never seen it.

Mr. LEE remarked that the quantity injected in Dr. Jones's cases appeared to be very large, and of course any solution injected into the veins would act more powerfully than when injected into the cellular tissue. A safe plan was to withdraw the needle (after its introduction) about one-eighth of an inch.

Mr. CARTER said that the late Professor von Graefe, who was accustomed to use these injections, took instantaneous action as the test of the solution entering the veins, and in such cases was accustomed to withdraw the piston before removing the needle.

Dr. DUCKWORTH quoted a fatal case, and

Mr. BARWELL made some remarks indicating that the results of hypodermic injection should not be judged by Dr. Jones's cases, inasmuch as there appeared to be in one or more of them some heart complication.

Dr. BUZZARD, from an extended experience of the system, thought that some importance should be attached to the pain of the operation, and that Glover's steel needle was perhaps the best kind of instrument. He related the case of a lady who had come indirectly under his care, who stated that she had frequently received 32 gr. of morphia in twenty-four hours by subcutaneous injection. He injected in this case 5 gr. and afterwards 15 gr., which produced only slight contraction of the pupils.

After some remarks by Dr. HUNTER, indicating that any risk as to the introduction of air into the vein can always be obviated by filling the syringe with more of the solution than is actually required, and that the pain of the injection can be much modified by admixture of the solution with glycerine,

The PRESIDENT recommended that a committee should be appointed "to consider the indications, if any, against subcutaneous injections."

Dr. HANDFIELD JONES wished it to be distinctly understood that he had not brought forward his cases with the view of condemning the plan, but that one fatal case should be balanced with many of those that had been successful. He had no fear of coma, but thought that the plan was objectionable in cases of suspected heart disease.

A Report upon Mr. T. Smith's case of "Ulcer following Vaccination," by Messrs. Gascoyen and Berkeley Hill, was read. Mr. Smith read further notes of the case, collected subsequent to the committee's report, and a very animated discussion followed, in which Mr. Henry Lee, Mr. Watson, Mr. Brudenell Carter, Dr. Greenhow, and the President took part. The debate was adjourned, on the motion of Mr. Carter, to the next meeting of the Society, when it is probable that Mr. Smith may have gleaned some further evidence on the history of the case.

The committee on Hypodermic Injection consists of Dr. Handfield Jones, Dr. Burdon-Sanderson, and Mr. Barwell.

## Reviews and Notices of Books.

*A Digest of Facts relating to the Treatment and Utilisation of Sewage.* By W. H. CORFIELD, M.A., M.B. (Oxon.), Prof. of Hygiene and Public Health at University College. Prepared for the Committee of the British Association. Macmillan and Co.

WE are greatly disappointed with Professor Corfield's book. If it had been the prize essay of one of his own pupils, we should have commended it as a very creditable production. We could then have overlooked the many serious omissions and errors it contains, and we could have forgiven the crude collection of long quotations which form the greater portion of the volume. These quotations reach from the days of Sallust until now, and are taken chiefly from reports familiar to the merest tyro in sanitary knowledge.

Sewage is defined to be "all refuse of human habitations affecting the health of the country"; and in the early chapters we have a description of the primitive methods of dealing with human excreta, followed by a selection of instances proving that filth is a cause of disease. The third chapter principally consists of a *réchauffé* of the recent reports of Dr. Buchanan and Mr. Netten Radcliffe on improved

middens, pail-closets, &c.; the name of the latter gentleman is not, however, once mentioned. In denouncing all methods of removal by scavenging, Dr. Corfield thinks that the question to be solved has been erroneously put—namely, "How can refuse matter be kept as long as possible without being dangerous to health? instead of, as it should be, How can it be got rid of as fast as possible?" But these questions are not antagonistic. On the contrary, they have an equal importance in a sanitary and economical point of view. The one follows naturally on the other. It has been abundantly proved that refuse can be got rid of by scavenging before it becomes dangerous to the public health; and the question naturally follows, Up to what period can it be safely treated in this way?

Dr. Corfield has again recourse to the assistance of Dr. Buchanan in discussing the propriety of earth-closets, and he follows his author in not relating any cases of public institutions in which they have failed and been removed, although there are several to be found. He omits some of the most important objections—namely, the dispersion of a disagreeable dust throughout the house when earth-closets are used in-doors, and the swarms of flies which are attracted to them in hot weather. Dr. Corfield has clearly very little practical experience of the various forms of water-closet. He again closely follows the Privy Council and other Sanitary Reports. He thinks water-closets fail in poor districts because they are not self-acting; and yet it must be acknowledged that the more complicated the machinery the more liable it is to be damaged by ignorant people. The proposal that the sanitary authorities shall undertake the whole supervision is just as objectionable in the case of water-closets as in that of midden-closets. It is curious that in the description of the various forms of closets and urinals we do not find the name of Jennings, who is the proprietor of more patents and has constructed more sanitary apparatus than any other manufacturer in the world; whilst Macfarlane is almost equally ignored.

On the construction and ventilation of sewers Dr. Corfield is almost from beginning to end behind the most recent opinions. He is an advocate of "impervious sewers," whilst the best modern engineers make them as open as possible. In London, Bedford, Carlisle, and many other towns, the sewers have thousands of openings in the centre of the roadway; and at Croydon, with its pipe-drains, it was found absolutely necessary to make them. Untrapped gullies are unpleasant, and possibly dangerous, to the persons who live near them; but, at all events, it is better that the offensive emanations should escape into the street than that they should be forced into the dwelling-houses. Dr. Corfield was clearly never down a sewer, or he would not have believed that flushing, or anything else, will prevent the formation of sewer gases. Bristol and Leicester are particularly unfortunate instances to select as good illustrations of flushing without ventilation, both towns being at present in a most unhealthy state, due most probably to the escape of sewer gases through the service drains. As to ventilation, we have no mention of the capital experiments of Dr. Miller, undertaken for the Metropolitan Board of Works, or of Mr. Gurney at the Houses of Parliament; but, on the contrary, the absurd proposal to ventilate a sewer like a mine is reproduced, and the plaything in use at Liverpool gets all the credit its advocates choose to give it.

It is unnecessary for us to comment on the successive quotations from the Pollution of Rivers Commission, and we pass on to the *résumé* of facts concerning sewage irrigation, which is undoubtedly the most satisfactory portion of Dr. Corfield's book. We here discover incidentally that he has visited Croydon, and enjoyed the hospitality of Mr. Hope at Breton's Farm, and it was probably impossible for him to have conversed with such an enthusiastic sewage irrigator without imbibing a portion of his zeal. This section of the book is undoubtedly that which is most required, and will be most read. The volume before us proves that sanitary science is only just emerging from the ignorance of infancy. It is certain that the subject is much wider than the mere question between scavenging and water carriage. We are of opinion that closer investigations by practical men will considerably modify opinions and practices which have at present almost the force of maxims, and that the digest of sanitary experience, corrected to the standard of the best sanitary engineers, has still to be written.

---

*On the Texture, Structure, and Cell Life of the Appendages of the Human Ovum.* By Dr. F. N. WINKLER, of Jena.

THIS pamphlet gives the results of labours that must have occupied considerable time. The subject possesses some practical importance, and the following account will be found to embrace the principal points of the essay.

The amnion is divisible into two layers: the connective tissue layer, continuous with the cutaneous fibrous lamina; and the epithelial layer — that is, a peripheric expansion of the epithelium covering the skin of the embryo. The latter, consequently, in His's view, is a true epithelium. The substratum of the amnion exhibits a tolerably simple composition, consisting of cells embedded in a homogeneous mucous matrix, which as pregnancy advances becomes fibrillated. Its thickness and the number of cells it contains vary at different points of the ovum. The cells are fusiform, and anastomose with each other by means of stellate processes. In some parts, instead of these cells, simple cavities of a more or less tubular form occur in the intercellular substance, constituting a kind of serous, or, as the Germans term it, juice-canal system (*saftcanälchen-system*), the cavities probably indicating the position formerly occupied by cells. He thinks it probable that some of these cells are amœboid, and bore their way through the matrix. These, however, are sparing in number, and are not discoverable in mature ova, but are found in those expelled prematurely. These cells are small, rounded, or with but slight irregularities on their surface, and filled with highly refractile granules. They are deeply stained by iodine and carmine. They have a tolerably large nucleus. Other cells found in the matrix are larger, with stellate and anastomosing prolongations, into which fluids can be injected. These are possibly a more advanced stage of development of the amœboid cells. In the amnion of the mature embryo the cells are found to have undergone more or less complete fatty degeneration. The canal system formed by the anastomosis of the cells opens by free funnel-shaped orifices, on the one hand into the gelatinous layers, and on the other hand between the epithelial cells into the cavity of the amnion. Of this Dr. Winkler has quite satisfied himself, and furnishes several drawings of the appearances exhibited. They remind one of the openings of the lymphatics stated to exist in those of the tendinous centre of the diaphragm, and communicating with the abdominal cavity.

The cells of the epithelial layer vary in size, both in the same and different ova. The nucleus and nucleoli are always very distinct. Both the individual cells and the nuclei sometimes present vesicular dilatation into large transparent bodies. They are united together by a cementing substance. They are occasionally separated by intercalated laminæ (*schaltplättchen* of Auerbach), and here and there by stomata, leading to the canaliculi pervading the gelatinous layer.

The gelatinous layer presents many points of analogy to

the substratum of the amnion, consisting of mucous tissue, with cells distributed through it, but offering considerable variations in its appearance at different periods of gestation. By all recent observers it has been regarded as the remains of the germinal matter—a view to which its thickness in young ova, and progressive diminution and attenuation as age advances, lend support. But even in young ova the quantity may be very sparing, and Winkler met with one in which, at about the eighth week, scarcely any intervening substance existed between the amnion and chorion; whilst in mature ova considerable masses of trembling gelatinous material may sometimes be found; and he considers it reasonable to hold that it participates in the process of development. The cells it contains as the ovum advances to maturity undergo complete fatty degeneration. At an early period numerous well-marked migratory cells occur; at a later date fixed and stellate cells, with long processes; and between these extremes are all intermediate forms. From the migratory cells fragments are often detached, similar to those described by Klein from the white corpuscles of the blood. They not unfrequently congregate together in nests or masses, and sometimes coalesce.

In regard to the chorion, Dr. Winkler remarks that it has received much more attention than the amnion at the hands of numerous observers, and the new facts he has to communicate respecting its structure are consequently fewer and less important. The chorion, up to its placentary part, is a complete copy of the amnion. The substratum presents the same cells, and probably the same canalisation of the tissue, opening towards both the gelatinous and the epithelial layer. The adhesion of the epithelium of the decidua to that of the chorion is very intimate, though they are clearly distinguishable from each other, the form of the latter being more columnar, and staining more deeply with carmine than the former. Towards the end of pregnancy the membranous portion of the chorion, like other membranes of the ovum, exhibits well-marked indications of decrepitude. Towards the placenta the substratum of the chorion becomes thicker, so that the fœtal surface of the placenta forms a tolerably dense membrane, termed by Joulin "membrana laminosa." This layer is thick enough to have cavernous spaces in its substance, containing a greenish transparent serum in their interior, which is lined by an endothelium, demonstrable by carmine, iodine, or silver.

On the side averted from the fœtus, thick, columnar stems originate, that break up into the villi or finger-like processes of the chorion, which are composed of an axis of mucous tissue invested by epithelium. The bloodvessels run in the axis. The cells are characterised by presenting no indications of decay or disintegration towards the end of pregnancy. The mucous tissue presents beautifully developed anastomosing stellate cells. The walls of the capillaries are composed of specially-arranged cells, amongst which stomata are discernible, though Dr. Winkler was not able to convince himself that they really represented apertures in the walls.

The epithelial covering of the villi consists of large cells, containing large, coarsely granular nuclei, with large and usually distinctly vesicular nucleoli. The protoplasm is very hyaline, and varies much in quantity. Its boundaries are not readily traceable, and, as it can be raised by maceration, almost resembles a separate membrane.

The vena coronaria placentæ he regards, with Robin, Bidder, Kölliker, Weber, and R. Wagner, as being a maternal—i.e., a decidual vessel. The separation of the placenta he attributes neither to fatty degeneration of the marginal layer, as Hegar supposes, nor, as Dohrn thinks, to the growth of that layer, but to increased rigidity of the placenta from the development of connective tissue.

*Henry Sewill's Irregularität und Krankheiten der Zähne.* Deutsch von Dr. AUGUST KÜHNER. Berlin, 1870.

MR. SEWILL'S practical and useful little treatise on "Irregularities and Diseases of the Teeth," a portion of which first appeared in our columns, and of which as a whole we have had to speak in very commendatory terms, as being calculated to convey to the family practitioner a kind of information, especially about the management of irregularities of the teeth in children, which can hardly be obtained elsewhere in an equally accessible and convenient form, now comes to us in a German version, having been translated by Dr. August Kühner, of Gräfenthal. It is always agreeable to see the merits of English writers thus recognised by their continental brethren; and we congratulate Mr. Sewill on the wider field of usefulness thus opened to his work.

## SANITARY WORK IN INDIA.*

### No. II.

WE now proceed to the Appendices of Dr. Cunningham's Report. The first is a most elaborate and accurate account, by Dr. Lewis, of the Microscopic Objects found in Cholera Evacuations. Unfortunately, the investigation by Dr. D. D. Cunningham, who was associated with Dr. Lewis in this inquiry, has not yet been published, owing to the severe illness of Dr. Cunningham. We believe, however, we are correct in stating that the two observers have compared their results, and that in giving Dr. Lewis's results we are also stating those of Dr. Cunningham.

Dr. Lewis has pursued the following method. He first gives an account, with drawings, of the observations of Hallier, Brittan, and Swayne, so as to show the points to be examined; and then, adopting Hallier's enumeration of cysts, spores, and micrococci, he arranges his own observations under these heads. Every statement is illustrated by beautiful drawings of the microscopic objects.

1. *Cysts.*—Many cysts were found, often very similar to those figured by Brittan and Swayne and Robin. All the different kinds were identified by Lewis as follows: Ova of a round worm, perhaps of the Ascaris mystax; ova of another round worm, probably the Tricocephalus (dispar?); eggs of acari; other ova, which are not peculiar to cholera; fragments of various tissues and fat, surrounded by a fibro-albuminous layer. In no case did Lewis find in fresh cholera dejecta a fungus cyst with distinct spore contents; but he obtained such cysts with some difficulty (three times in a hundred) by cultivation, both in cholera dejecta and in other menstrua. The fungoid cysts thus produced by cultivation were sporangia of common fungi (aspergillus and penicilium), and were also found quite irrespective of any cholera dejection. Many of these cysts precisely resembled Hallier's cholera fungus.

2. *Spores* are extremely common in cholera dejections. Many of these bodies can be referred to one of four classes, of all of which drawings are given: (1) globules of a fatty nature; (2) altered blood-cells; (3) corpuscles embedded in the tenacious substance composing the "flakes"; (4) globular conditions of certain infusoria. The result of this part of the investigation is that the bodies in cholera dejections, termed by Hallier "spores," are not so.

3. *Micrococci.*—This term, which is now coming into use to include almost any kind of minute point supposed to have life, is applied by Hallier to denote the broken-up particles of a spore, and which particles can, under certain circum-

* Sixth Annual Report of the Sanitary Commissioner with the Government of India, 1869. Calcutta, 1870.
Report on the Sanitary Administration of the Punjab, 1869. Lahore: Lawrence Press. 1870.

stances, develop into the higher forms of fungi. It is the micrococci of a peculiar fungus which, according to Hallier, constitute the active agent or so-called "germ" of cholera. But it is quite evident that, if it cannot yet be said that his cholera micrococci are decidedly not the agency by which cholera is propagated, it is still certain that the evidence on which Hallier relied to prove this has not been found so readily available as he represented. As he has been shown to be wrong both as regards his cysts and spores and as regards his peculiar fungus, we are inclined to doubt if his hypothesis of the micrococci will have a better fate. On this point we look forward to Dr. Cunningham's report with great interest, and to further observations by Dr. Lewis.

The second part of Dr. Lewis's report deals with the measures taken to test Pettenkofer's hypothesis of the influence of the ground-water alterations of level on cholera. The observations are as yet incomplete, so we will not enlarge on them now, but merely remark that, so far, they are not very accordant with the view so strongly and so ingeniously argued by Pettenkofer. Still they do not disprove it, nor, as far as we see, do the observations of Dr. Townsend on cholera in Central India entirely set aside Pettenkofer's opinion. In another year or two, however, reliable information on this point will be forthcoming.

We cannot leave Dr. Lewis's report without expressing our conviction that the Indian Government have seldom done a wiser thing than in authorising the employment of himself and Dr. D. D. Cunningham in this most important inquiry.

The second Appendix is a report by Dr. Bryden on the Cholera of 1869. It is full of important statistical details, and to his views we shall have occasion to revert hereafter.

The third Appendix contains the new cholera rules to be observed on the outbreak of cholera among European troops. They are ninety-five in number, and embrace every possible contingency. Promptitude of removal is insisted on, with the view of preventing a number of men becoming infected and carrying the disease with them, as has often occurred. The rules altogether appear to us very judicious and precise.

The number of reports that reach us from India quite preclude the possibility of our noticing more than a tithe of them; but we cannot omit calling attention to the Report on the Sanitary Administration of the Punjab for 1869. Its author is a firm believer in the influence of impure water as the chief medium of the dissemination of cholera, and he holds that the law of cholera diffusion in India is the same as it is in England. Dr. de Renzy does not hesitate to enter the lists with Dr. Bryden, and it seems to us that he delivers some very telling and effective blows at the elaborately constructed theories of his statistical *confrère*. The native population believe that the number of a man's days and the sickness that he endures are fixed by the decree of fate, which it is idle, if not impious, to resist; and the occurrence of epidemics, such as that which fell with so fatal an effect upon the small body of Europeans at Peshawur last year, only serves to stamp the conviction upon their minds that to invest money in sanitary work in India is simply to throw it away. Nor is this scepticism by any means confined to the natives, for Sir William Mansfield, in some remarks, commented upon our absolute ignorance of the causes of the origin of cholera and of the manner in which it is propagated. These despondent views are very prevalent among Europeans, but Dr. de Renzy says that he invariably found that those who held them had no familiar acquaintance with the nature of the preventive system adopted in England and with the results attained by it. With the courage that could only arise out of a thorough belief in the power and efficacy of the principles of this system of prevention, Dr. de Renzy proposed that it should be tested experimentally at Peshawur, Amritsur, Kohat, and a few other places. If Peshawur can be secured against cholera, he says, every town can. The Government adopted the policy of sanitary improvement, and orders were given to have the necessary surveys and estimates prepared. The Lieut.-Governor having expressed himself convinced by the arguments of Dr. de Renzy, we may expect to have recorded in some future reports the effect of a good water-supply and of a system of covered drainage in preventing or limiting the ravages of cholera.

We next turn, however, to Section II., or the history of the epidemics of 1869, and the lesson it conveys. We wish that our space would allow of our entering upon the interesting details connected with the prevalence of cholera at Amritsur, the districts of Lahore, Peshawur, and Kohat. The facts leave no doubt upon our mind as to the influence of both impure water and human intercourse on the spread of cholera. The absolute or relative immunity of some gaols and forts, with a separate source of water-supply, during different epidemics, of which Dr. de Renzy cites several examples, seems to us to be explicable on no other grounds than those he has advanced. We may take the case of the Kohat Gaol during the epidemics of 1862, 1867, and 1869, and that of the fort of the same place, and of the three out-post forts at the bottom of the *cul-de-sac* of the Peshawur valley, which passed through the epidemics of 1867 and 1869 almost entirely unscathed, though surrounded by villages that suffered terribly from cholera. And to the already large list of instances in which the spread of cholera has been fairly attributable to human intercourse, we may add Dr. Johnson's account of the origin of the epidemic in the villages of Hoti and Mardan (cited in the "Sanitary Report of the Punjab"), and the facts connected with the occurrence of cholera at Mont Aboo. With regard to the first, Dr. Johnson reports that he is in a position to speak positively as to the chronological course of the events he records; and from these he deduces that the epidemic started from Peshawur, travelled sixteen miles of populous country, crossed two rivers, and established itself on the left bank of the Swat river, in five or six days, while its journey over the same extent of open uninhabited country, intervening between the river and Mardan, occupied thirty days. "If atmospheric influences were the only, or even the chief, agents exerted in disseminating the disease in the instance under notice, it is, to say the least, remarkable that they should have propagated it over sixteen miles of populous country and two rivers in six days, and yet have taken thirty days to convey it over sixteen miles of open uninhabited country, without rivers, and lying in identically the same line.....The facts observed by myself—viz., the rapid spread of the disease through a district studded with villages, its halt in the midst of human habitations, and subsequent slow progress over an open plain, together with the three unequivocal instances narrated of its introduction by individuals from infected localities, have led me to the conclusion that it was carried about and propagated from place to place almost exclusively by human beings."

With regard to the outbreak of cholera at Aboo we take the facts from the supplement to the *Gazette of India* for June, 1870. With the exception of a few mild cases in 1866, the first time that cholera occurred in this locality was in 1869. The disease was prevailing in Rajpootana. It appeared at the village of Anadra on June 6th; at Omedgunge on June 11th; in the station of Aboo on June 17th; and in the village of Shaulgaum on July 11th. In order to appreciate the importance of these dates, as unmistakably demonstrating the importation of the malady by human intercourse, the nature of the locality must be borne in mind. Mount Aboo is an isolated hill composed chiefly of granite, a detachment from the great Aravelli range. The village of Anadra is situated a mile and a half from the foot of the hill, and the village of Omedgunge half a mile from the foot. The ascent from the latter locality is very abrupt, and formed chiefly by a zig-zag road, built against the face of the mountain. This is altogether impassable for carts, and, unless in good repair, is scarcely surmountable by horses. The height of Aboo may be generally stated as averaging 3000 feet above the level of the plains below. There are no other ordinary means of communication with the summit, excepting the abrupt ascent above mentioned. On reaching the top, a mile of undulating ground takes the visitor to the station, and another mile and a half to the village of Shaulgaum. From Shaulgaum, another mile and a half east reaches the opposite or eastern descent. The importation of the disease from Anadra to Omedgunge, and up the hill, was clearly traced. The ascent to Aboo faces the west, and the village of Shaulgaum is to the east. If, therefore, cholera were "air-conveyed" from Dr. Bryden's epidemic localities, the latter village should have been first attacked, and the cholera should have proceeded down the hill to Omedgunge and Anadra; whereas the exact reverse was the case. We have yet to examine Dr. de Renzy's criticism of Dr.

Bryden's theory, and to afford our readers a brief *résumé* of what the former considers, rightly or wrongly, to be at once the simple and practical method of explaining the occurrence of cholera in the Punjab. This we purpose doing in a subsequent article.

## OUR REVIEW OF THE PRIVY COUNCIL SANITARY REPORTS.

IN THE LANCET of November the 26th we published some remarks in reference to the sanitary condition of the town of Stamford, founded on the report of a Government Inspector, in which the name of Mr. John Dabbs incidentally appeared. We have received from that gentleman a letter, of which the following is the essential part:—

"About eight years ago I deepened an existing cesspool, and some months after having deepened it I observed a slightly cloudy appearance in the well water, although the tastelessness of it remained as before. Being determined to avoid every chance of impurity, I called in a builder and a stonemason, both of whom, after drinking the water, said they could not find much amiss in it; but they suggested that, if I was determined to try to alter it, I should have the cesspool concreted. I immediately had the cesspool cleansed and *securely concreted*, at a considerable expense, and then had *all* the water pumped *twice* out of the well."

We have pleasure in giving insertion to Mr. Dabbs's explanation of the facts, which he considers to be at variance with the statements of the original report. But in our opinion his statement substantially confirms the particulars contained in the report of the officer of the Privy Council.

# Foreign Gleanings.

### ILEUS CURED BY ELECTRICITY.

DR. MACARIO, of Nice, has published this case in the *Annali Univ.*, Oct. 1870.—The patient was a gentleman of seventy-one, who, being habitually costive, used purgatives and clysters to excess. On the 22nd of February last he had taken, in the morning, no less than six enemata of warm water to open the bowels, and eaten his meal as usual. Half an hour afterwards he was seized with severe pains in the umbilical region with some vomiting, and an alvine dejection took place at 4 P.M. The latter seemed to be simply the expulsion of the clysters. From that time no fæces or flatus passed, and the patient, presenting a haggard countenance, and suffering severely from cramps in the legs, had all the appearance of a man stricken with cholera. A consultation was arranged for the next day, and Dr. Macario proposed, as no hernia could be discovered, to use electricity. A powerful battery was procured, and one of the conductors was placed in the rectum, while the other, covered with a wet sponge, was moved about on the abdominal parietes. The latter contracted energetically, the surface of the abdomen looking, says Dr. Macario, like a sea agitated by billows. The patient experienced much pain, and begged that the current might be broken. It was continued for ten minutes; the vomiting ceased, a visible improvement took place, and four hours afterwards the bowels were moved, several evacuations taking place the same night. Whether the case was ileus or not, it is clear the galvanic current proved very effectual.

### DYSENTERY IN CHILDREN.

Dr. Dyes (*Journ f. Kinderkr.*, Parts 5 and 6, 1870), has observed that some autumns pass without an epidemic of dysentery, though diarrhœa is prevalent. He considers that the former complaint is the result, not simply of the use of unripe fruit, which merely gives rise to diarrhœa, but to a peculiar pellicle which, in certain years, covers the fruit. This pellicle is, according to Dr. Dyes, composed of animalcules, the latter being the principal cause of dysentery. To prevent the effect of this fruit, chlorine water should be administered to destroy the parasites. This remedy, and promoting the action of the skin, may altogether prevent attacks of dysentery when such noxious fruit has been ingested.

### PLEURITIC EFFUSION AFTER TYPHOID FEVER; PARACENTESIS THORACIS.

Dr. Bergeret publishes, in the *Lyon Médical* (Nov. 6th, 1870), the case of a man, aged twenty-six, who, just recovering from typhoid fever, was seized with pleuritis and effusion. As ordinary means remained unsuccessful, paracentesis was performed with a trocar running through the top of a bladder. At one time bubbles of air were seen to enter the chest, but they left it again on each expiration. The case did well, though three quarts of serum were removed, and Dr. Bergeret expresses the opinion that the entrance into the chest of a little air is not so prejudicial as has been stated.

### CARBOLIC ACID IN PRURITUS.

Dr. Binz, of Bonn, has tried this acid in the very obstinate complaint known as pruritus cutaneus. The patient was a man, aged seventy-four, who took gradually from the fifth of a grain to nineteen grains a day. The improvement increased in the same proportion as the doses. Dr. Binz ordered the medicine to be omitted several times, to try whether the favourable changes were the result of chance; but whenever the acid was given up the complaint returned. Dr. Kemmerich tried the acid upon a young soldier affected with pruritus, without success, and gave arsenic with excellent effect.

### UREA ON THE SKIN.

In the *Deutsch. Arch. f. Klin. Med.*, vol. vii., parts 5 and 6, Dr. Deininger published the case of a boy five years of age, who suffered from anuria renalis for a whole week, and on whose skin urea was discovered. Five cases of this kind have been recorded by Jürgensen and Leube; but the issue was fatal in all, whereas Dr. Deininger's patient recovered. This vicarious function of the skin is therefore proved, and should encourage us to use diaphoretics whenever the action of the kidneys is diminished, or altogether abolished.

### PALATABLE COD-LIVER OIL.

Dr. Pavesi states (in the *Ung. Med.-Chir. Presse*, No. 44) that cod-liver oil, macerated with burned coffee and charred ivory, loses its disagreeable taste, and gives the perfume of coffee. Hutet also mentions that one grain of iodine, added to a teaspoonful of a strong infusion of coffee, has no longer any taste or smell, and does not give the blue tinge to starch.

## SPONTANEOUS EXPULSION OF THE FŒTUS.

*To the Editor of* THE LANCET.

SIR,—As cases of spontaneous expulsion of the fœtus are comparatively rare, I beg to send you the following short history of a case:—

On September 8th, 1869, I received an order to attend Mrs. C. R——, who was in labour, the midwife in attendance desiring my assistance, as the child "lay across the womb." On my arrival at the place (distant three miles from my house), the child was just born, and dead. The midwife informed me that the woman had been in labour for many hours; that the hand and arm had come down; and that, finding she could do nothing, she had sent for me; but, the pains becoming very violent and quick, the child had been born without assistance, the head being the part which came last into the world. I found the child well formed and of average size, the right arm and shoulder (especially the latter) being, however, quite black, as if from congestion due to pressure.

This case is also interesting from the fact that the same mal-presentation occurred at the next labour, on Sept 21st, 1870, when I got a message from the same midwife, telling me that Mrs. C. R—— was again in labour, and the child "lying across the womb" as before. I immediately went, and found the hand and arm presenting externally—a condition of things which had lasted for some hours. Not thinking it safe to trust to the chance of spontaneous expulsion again taking place, I performed version in the usual manner, and in a short time the child was born alive, and both mother and child have since done well.

I am, Sir, your obedient servant,

Child Okeford, Blandford, Nov. 22nd, 1870. DECIMUS CURME.

# THE LANCET.

LONDON: SATURDAY, DECEMBER 17, 1870.


THE letter of "Observer" in our impression of last week has respect to a question of high importance and extreme delicacy, upon which we, in common with the profession at large, feel sensitively—namely, the power of the Crown, or of Parliament, over the acts and regulations of the General Medical Council. Our correspondent discusses this subject with so much force and earnestness that we feel bound to refer to the point here in some detail. Let us at once agree with our correspondent so far as to allow that some association with the Crown cannot bring with it anything but power and dignity to the acts of the Medical Council. We are quite alive to the fact that the Council under our Bill would be a body brought into existence solely, or almost solely, in the interest of the State; and it is but natural and reasonable that the State should have considerable power in regard to it. This is true, not only of the Council which we propose, but of the Council already in existence. The great charge brought against the present Council, and to which no answer has been or can be made by any of its able apologists, is that it is so constituted as to give no security that the public interest shall be first considered in its doings and regulations. If the provision and distinction of a well-educated class of practitioners of medicine were not a matter of immense importance to the public, we should neither need nor have a Medical Council to regulate medical education and examination. Parliament would leave all men free to sell their medical advice as it leaves men to sell their silks or their groceries. Everything points to the necessity of a more intimate connexion between medicine and the State. We have not been unmindful of this fact in framing our Bill, for we have given the Crown the right of nominating no less than one-third of the members of the General Medical Council. We have not proposed any restriction upon the Crown in the selection of its nominees. They might, if the Crown should see fit, be the representatives of the medical departments of the public service, or they might include the medical adviser of the Privy Council. We thought that in giving such a representation to the Crown in the composition of the Council we were doing all that is necessary. "Observer" thinks not; and, agreeing thoroughly with the main principles of our Bill, he thinks it may be necessary, upon constitutional principles, that some power of controlling the regulations and acts of the Council must be conceded either to the Crown or to Parliament. Undoubtedly, if such a power is to be given to any authority in the State, the Privy Council is the body in which it would have to be lodged. It is the department of the State which has authority in all questions connected with education or arising under the University Acts. "Observer" may possibly be right; but we are not without hope that Parliament itself will see that in the large representation of the Crown in the Council proposed by us, and the direct representation of the profession irrespective of all corporate interests, coupled with the institution of perfectly independent examining boards, ample security is given that the public interests will be primarily considered in the doings of the Council. There is one very strong reason for not putting the power of control into the Privy Council's hands, which was urged forcibly by the Marquis of SALISBURY, that it has quite enough on its hands already. If this reason were strong last session, it is likely to be still stronger in the next, when the Education Act will be in operation, and when the unchecked prevalence of fatal epidemics is likely to be made a matter of censure and complaint to the Government. We do not dilate here on the fact that reference from the General Medical Council of our Bill to the Privy Council would practically mean reference from twelve persons skilled in the particular question to one person. But this is a true point. So long as the Privy Council is under the guidance of so able and wise an adviser as at present, this would not matter much. But there is always a chance of a weak crotchety man being put into such a position, and it would be at once a degradation to the profession and a calamity to the public to have the regulations and acts of an efficient Medical Council interfered with by such a person. An esteemed correspondent, in a private communication, suggests giving to the Crown the nomination of the chairman of the Council by way of increasing its influence in it. Any plan would be better for the public and more acceptable to the profession than that of not making the regulations of the Council absolute and authoritative. Still, of course, we cannot expect it to be allowed that a body with such important public functions should be gifted with any unconstitutional powers. The power, for example, given to the Council to refuse the registration of qualifications granted by the various medical authorities, is one that, under the present Act, can only be exercised by the Privy Council. It may be that such powers, even under our Bill, must yet be exerted through the Privy Council. If such a necessity exist in the nature of things or of our political constitution, all we can do is to submit to it. There is this comfort, as "Observer" points out,—that with a reformed Medical Council as we propose there would be no probability of serious difference between it and the authorities of the Privy Council. Under the Bill of the Government, as finally modified, it was arranged that, if the Privy Council did not see fit to confirm the schemes and regulations of the Medical Council, the said schemes and regulations had simply to be withdrawn and fresh ones prepared. This seemed to involve a further reference to all the medical authorities in every part of the country, and a fresh meeting of the General Medical Council. Under our Bill the authorities would not be individually consulted, and the Council would act upon considerations of public interest, such as would weigh also with the Privy Council.

Now we have one favour to ask of numerous correspondents and of the profession at large. It is this—to criticise our Bill more from the public than from the professional point of view. Let them remember that it is a Bill for Parliament to accept, and a Bill primarily to protect the public from the risk of inefficient practitioners.

Some of our correspondents seem to think that the great thing a Medical Bill should do is to put down quackery. Now, if there were no liberty for a little quackery, the public would lose one of its schoolmasters by which it is taught the difference between science and humbug. Parliament will never prevent fools from going to fools or even to knaves for their advice; it is one of the educational arrangements that will be always permitted in a free country. All it will do is to impose heavy fines on false pretensions, and to make the procedure for punishing false pretences tolerably easy. All the profession asks is that its own ranks be kept free from the intrusion of badly educated persons, and that professional titles be regarded as sacred, and the false use of them as criminal.

---

THE guardians of the poor of Exeter have recently passed a resolution which will, we should fancy, be totally inoperative; but which derives importance from the spirit that it evinces, and from a certain spurious humanity by which it appears to be characterised. It is that "the Board desire to express to the medical officers for the out-door poor their wish that in all applications for medical attendance they will not think it necessary to wait for the order of the relieving officer, but will pay their first visit without it." The guardian who moved the resolution (Mr. PEARSE) is reported to have said that "cases might arise where, from the ignorance of the parties requiring medical relief, they might not know anything about getting the order from the relieving officer. If such a case occurred, and a patient were to die whilst people were going from one to another, there would be sure to be a public outcry."

Now it is doubtless desirable to avoid a public outcry, and still more desirable, we should think, to avoid the untended death even of a possible pauper. Thus much we may concede to Mr. PEARSE willingly; but we must beg him at the same time to take courage, and to reconsider the basis of his fears. The poor are by no means such fools as he represents them; and cases of sudden illness, when they tend to a rapidly fatal issue, are usually beyond the reach of medicine. The only possible condition of things that could even seem to justify the resolution would be the frequent and prolonged absence of the relieving officer from his place of business; and this would constitute an abuse proper to be altered at the expense of the ratepayers, say by providing an assistant or a deputy; but not at the expense of the time and medicines of the district medical officer. The resolution should at least have had a rider to the effect that the Board would pay the medical officer a reasonable sum for his visit and medicine, in every case in which a person visited in consequence of it was found to have no claim to parish relief. With this proviso the resolution would have been fair enough.

The business of the parish doctor is to attend sick paupers, in consideration (usually) of a paltry and insufficient stipend. The relieving officer does not certify the fact of sickness; but his business is to determine whether or not A or B is a pauper, and as such entitled to relief. Guardians know very well that medical relief is usually the first step to relief of other kinds; and, in many unions, they will only grant medical relief under very rigid restrictions. Thus a man with given wages, and four children, would, perhaps, receive an order; when a man earning the same wages, and with only two children, would be refused, as being able to subscribe to a club or a provident dispensary. It is impossible to cast upon medical officers the onus of determining whether an applicant is or is not a pauper; and to ask them to visit without an order is merely an attempt to rob them of their time and medicines, in order that no reproach may be cast upon their employers. In the case of acknowledged and avowed paupers it is customary to save their trouble, and the time of the relieving officer, by giving them an annual ticket, the production of which entitles them to be attended. Such a plan is practised in many unions, and is found to work satisfactorily. But the medical officer is entitled to some kind of official declaration that any strange or new applicant is indeed a pauper, and therefore has a claim upon him, before he neglects other business to attend to the case. An Exeter medical officer who should obey the resolution might very well chance to incur blame for neglecting a real pauper, whilst he was actually engaged in attendance upon a supposititious one.

Let us take a single example of the way in which the resolution would affect the position of medical officers. In cases of pauper midwifery it is usual for the patient to procure and present the order in anticipation of the event, and to have only to send a message when labour commences. Let us suppose that a man was considered by the relieving officer able to pay a fee, and that an order was refused to him. He would simply wait until his wife was ill, and would then send an urgent message to the parish doctor; who, on the Exeter rule, would be bound to attend, but whom the guardians would certainly refuse to pay. In like manner a large proportion of cases involving "extras" might be repudiated. The guardians will doubtless say that they did not expect or desire to produce such results as these; and they will claim to be actuated only by a desire to benefit the sick poor, and to obviate the scandals that sometimes arise in the course of Poor-law administration. We repeat that they have no right to seek to benefit the poor at the expense of the doctor, or to put themselves in the position of the man mentioned by SIDNEY SMITH, who never saw another in distress without thinking it the duty of someone else to relieve him. If the guardians themselves supplied the drugs, their clearness of apprehension upon the point would be wonderfully increased. They would then see that the medical officers had no business to give away the medicines of the union to persons who might not be paupers after all. But, as long as none but medical officers suffer, guardians feel justified, nay, even virtuous, in being liberal. They are willing to give the doctor's time, and skill, and medicines, just as they would give the coat off his back if they could command it, or as they would give anything else in the world for which they were not called upon to pay the price.

It may be thought that these comments are too severe for the occasion, and that a resolution which we believe to be opposed to the law and beyond the powers of the Board might have been simply treated as a dead letter by all con-

cerned. We differ from this view entirely. The resolution of the Exeter Board of Guardians affords evidence of a laxity which is only too common in the dealings of their class with the medical profession. It seems to show an incapacity to take note of the plain terms and conditions of a written contract, and a desire to provide a loophole of escape, if their own arrangements should ever break down under the pressure of sickness. It is, in short, an attempt to foist their own duties, obligations, and responsibilities upon the shoulders of their medical officers, and as such it is deservedly condemned. If the arrangements of their relieving office are such as to bear investigation, the resolution must, moreover, be quite unnecessary, and can have no other effect than to promote the convenience of persons who either wholly neglect their sick children or take them to druggists or quacks, and who run for a doctor at the last moment, in the hope of obtaining from him a certificate that may enable them to avoid an inquest. It is not desirable that parish doctors should be made accomplices in infanticide.

---

IN trying to judge rightly between our correspondents on the subject of the condition of the medical profession in Glasgow, it will greatly assist us if we remember the ascertained facts of the case, and detach them from the somewhat excited statements on both sides. Dr. BLACK read a paper "On certain Aspects of Medical Reform" to the Medico-Chirurgical Society, which has a membership of two or three hundred practitioners. In this paper Dr. BLACK reflected severely on the state of the profession in Glasgow, especially in regard to the following points: that men of good professional position gave their services on very inadequate and undignified pecuniary terms; that there was not a class of strictly consulting practitioners in Glasgow, but that general practitioners were often called in consultation; that special hospitals and dispensaries were very rife in the city; and that hospital appointments in Glasgow were not regulated on any principle of justice and equity. It is impossible for us at this distance to judge minutely of the justice of the charges made by Dr. BLACK. Their complete proof would require more detailed evidence than has been published, or than ought to be published. In the absence of such proof, we are naturally led to consider to what extent Dr. BLACK is supported in his statements by his fellow-practitioners. It is admitted on both sides that there are exceptional facts and cases to justify his statements; but the question is, are such cases frequent enough to warrant Dr. BLACK in concluding that Glasgow is very much worse than other towns with which it may fairly be compared? Now the support which Dr. BLACK receives in making these statements can be measured somewhat exactly. He is supported by the Medical Association of Glasgow; but that is a small body, numbering only twenty-four members. What is the support accorded to him by the larger body of practitioners—the Medico-Chirurgical Society? This is the question about which our correspondents have differed too warmly on both sides: Dr. PERRY asserting that the statements and arguments in Dr. BLACK'S paper were very far from being endorsed by the meeting of the Medico-Chirurgical Society, to which they were read; and Dr. BLACK giving an uncompromising contradiction to Dr. PERRY. Dr. PERRY'S account of what took place at this meeting having been unanimously approved by the Council of the Society, and afterwards approved by all but nine members in a crowded meeting of the Society, we must conclude that the Medico-Chirurgical Society did not endorse the statements of Dr. BLACK. One or two correspondents write to say that this vote of the Society did not cover the whole question of Dr. PERRY'S account, in his first letter to us, of the extent to which the Medico-Chirurgical Society endorsed Dr. BLACK'S statements. But it seems to us that the vote of the Society was virtually an approval of Dr. PERRY'S account of the matter. Under these circumstances we would fain hope that Dr. BLACK has somewhat exaggerated the importance of exceptional facts. Of course truth sometimes is the treasure of the minority, rather than of the majority; and it may be that the Glasgow Medical Association is right, and the Medico-Chirurgical Society wrong, after all. It is scarcely possible, indeed, that such an amount of dissatisfied feeling could have been engendered in the minds of a section—confessedly a small one—of Glasgow practitioners without some good reason. In the interest of the profession of Glasgow, we would recommend all parties in the profession to unite in a quiet attempt to raise medical charges; to discourage pluralities and the multiplication of special institutions; and to consider the best way, in the interest, first of the public, and next of the medical profession, of disposing of hospital appointments. Glasgow has a magnificent university and the elements of a very great medical school. She has lately sent two of her practitioners to fill chairs in the Edinburgh University, one of them being a foremost man in the science and art of surgery. We are not sure that in the number of pure consultants she is far behind Edinburgh; for the fact is that in Scotland practice is not so sharply defined as in London and some of our large English towns. There is no reason why medical practice should not be as remunerative and as dignified in Glasgow as in any city of the kingdom. It only needs a good understanding between the members of the profession, and a determination on the part of those who are at the top of the professional ladder to hold high the doctrine of the value of professional services.

---

IN the last number of Professors HUMPHRY and TURNER'S *Journal of Anatomy and Physiology* is an interesting paper by Dr. CATON, of Liverpool, "On the Cell Migration Theory," which, it appears, was read at the meeting of the British Association in Liverpool in September, and is now for the first time published. Dr. CATON'S experiments were conducted in the mode recommended by Dr. COHNHEIM, the animals employed being frogs, subjected to the paralysing influence of woorara, and the part examined being the mesentery, in which inflammation was excited by mere exposure to the air. The phenomena observed were—first, a slight dilatation of the vessels, the membrane becoming perceptibly redder to the eye, with increased rapidity of the blood-current. Secondly, after this state had lasted for some time a gradual retardation of the blood-flow was noticed, commencing in the veins and capillaries,

and proceeding to complete arrest of the current; whilst the movement in the arteries continued for some time longer, and even after entire stoppage of the flow in the two former orders of vessels the corpuscles continued to oscillate in the latter with each systole and diastole of the heart, and during this period considerable congestion always took place. Thirdly, at the commencement of the observation the white corpuscles were carried along in the general current, in the veins occupying the "lymph space," and moving somewhat slower than the red corpuscles. Soon they became less regularly circular, and showed a tendency to adhere to the walls of the veins; later still large numbers of the white cells were deposited from the stream and covered the surface of the veins, and partially so of the capillaries. When the arterial current became slow, a few were also seen deposited in the arteries. The spontaneous or amœboid movements were now exhibited with considerable activity. And now Dr. CATON makes an observation that may, perhaps, serve to clear up the discrepancy that exists between the supporters and opponents of the view of the escape of the white corpuscles from the vessels; the latter of whom, however, are daily becoming less numerous. He operated, he says, on nearly a dozen frogs in succession without seeing anything further than the phenomena described above, notwithstanding that a very careful watch was maintained on the vessels of the mesentery; but these observations were all made on winter frogs, which are always more or less debilitated, and to some of which also too powerful a dose of woorara had been administered; and no sooner did he proceed to examine healthy and freshly caught vigorous frogs in the late spring than the escape of the white corpuscles through the walls of the smaller veins and capillaries was readily and distinctly seen—the corpuscles thrusting forth processes that penetrated the vascular wall, the corpuscle assuming an hour-glass shape when it was nipped by the wall, and gradually oozing through to the outer surface, where many soon collected. Dr. CATON was unable to observe any cell migration in fishes, but the whole process is carried on with extreme activity in the transparent parts of tadpoles, in which animals it may even be observed in the absence of any local inflammation. We think we may add a word of caution against what there now appears to be danger of too freely assuming—namely, that all pus-corpuscles proceed from these escaped white corpuscles. No doubt in all inflammatory foci they furnish a quota of the pus-cells discharged; but it must not be forgotten that VIRCHOW's observations have rendered it all but certain that in the inflammation of mucous membranes—such, for instance, as those of the urethra and of the eye—a large proportion of the corpuscles are derived from imperfectly developed epithelial cells too freely supplied with pabulum; and, again, that there is every reason to believe that in parenchymatous inflammations ending in suppuration the connective-tissue corpuscles participate, and by their proliferation form a portion at least of the pus-cells.

---

THE guardians of the Chertsey Union have decided upon adopting the boarding-out system under Mr. Goschen's recent order.

# Medical Annotations.

"Ne quid nimis."

## THE COLLEGE OF SURGEONS.

AT the Council meeting on Thursday, the 8th inst., Mr. Simon resigned his seat on the committee appointed to confer with the College of Physicians and the Apothecaries' Society on the question of a conjoint examination. Whilst we are sorry to lose Mr. Simon's services on the committee, we think he is only consulting his own dignity and the convenience of his colleagues by leaving them to deliberate without his presence. As the medical adviser of the Privy Council, and the promoter of the Government Medical Bill of last session, Mr. Simon always speaks with a *quasi* authority, and it is difficult to separate his individual opinions from those that have an official character. Under these circumstances, when every word becomes pregnant with meaning, and when silence may be erroneously translated into official acquiescence, it is much better for all parties that Mr. Simon should withdraw. The committee of the Council of the College is now therefore formed of the following eight members:—Sir William Fergusson, Mr. Busk, and Mr. Hancock (*ex-officio*), with Messrs. Quain, Hilton, Cock, Humphry, and Spencer Smith.

Mr. Gay took occasion to bring under notice the course of Practical Physiology now required for the College curriculum, and stated that he had been informed by more than one teacher that there was great difficulty in knowing what the course was to consist in. We are quite aware of the difficulty, and, with the view of aiding both teachers and pupils, have made arrangements (as we announced last week) to publish immediately a course of lectures on Practical Physiology by a teacher who has had considerable experience in the subject. We can assure Mr. Gay that the practical course does not mean extended vivisections by unpractised hands, but simply that, in the words of the regulation, "the learners themselves shall, individually, be engaged in the necessary experiments, manipulations, &c."; by which the learning of physiology will become a practical reality, instead of being pure book-lore, as at present. No doubt this course will entail extra work upon lecturers on physiology, and will require some extra accommodation in the way of laboratories, &c.; but this is only another argument in favour of the concentration of physiological teaching, to which we have more than once recently referred.

## THE OUTBREAK OF FOOT-AND-MOUTH DISEASE.

FOOT-AND-MOUTH disease was found last Friday to exist in one or more head of cattle at the Smithfield Club Show. The Privy Council issued directions on Saturday that no cattle at that show should be allowed to leave the metropolitan district alive. On Monday, however, this stringent order was modified; and cattle have been permitted to be removed, for *immediate slaughter*, to country districts on the following conditions—viz., that each application for such removal should be made by the purchaser or by the owner, and should show the route by which such animal was to travel; also that each animal should be accompanied by some responsible person named in the application, who should be present at such slaughter, and should certify to the Privy Council the fact of such slaughter having taken place; and that, further, all expenses should be paid by such owner or purchaser.

We perceive by an article in the *Farmers' Chronicle* of the 12th instant, that the Home Cattle Defence Asso-

ciation have discussed this matter of disease having broken out at the Agricultural Hall, and that their indefatigable secretary, Mr. Waller, has persuaded his Association that the disease originated in the contact of the prize cattle with Dutch cattle at the Maiden-lane Railway Station. But it is an ascertained and established fact that such contact never occurred; and, further, that the incubation of foot-and-mouth disease occupies usually from thirty-six to forty-eight hours, and very rarely more than three days; whereas the disease did not break out for about a week after the cattle had been deposited at the Agricultural Hall. The real source of the malady is easily recognised. With foot-and-mouth disease common in our London dairies and elsewhere, nearly all our London drovers are constantly in contact with it; and most of them not having been provided with, or having even earned, the testimonial of that estimable lady, Miss Burdett Coutts (consisting of a volume of "The Animal World"), the drovers have coarsely plunged, when reeking with the disease, into the cattle show; and, fingering their unconscious victims, have doubtless diseased the Christmas prizes.

## WATER-SUPPLY OF LONDON.

IT is very satisfactory to know that the Government, through the Board of Trade, is at last about to do something towards ameliorating the condition of the poor of London in the matter of water-supply. A Bill will be presented to Parliament next session, containing provisions with reference to the water companies, that will, if properly worked, ensure a constant supply to all tenements, appliances for the prevention of undue waste and fouling, regulations for altering and reducing the scale of charges of the existing companies, and skilled means whereby to test and to improve the quality of the water. It is, in fact, a great and useful scheme of centralisation, in opposition to the present state of things, by which obstacles of all kinds arise to the proper carrying out of sanitary recommendations. For, unless the medical officer of the Privy Council and his inspectorial staff are supported by other authorities, and unless legislative means exist and are applied in the carrying out and completion of measures enjoined for the preservation of health, the present and future labours of Mr. Simon and his staff will be comparatively fruitless. As matters are now carried on, we cannot but think that the sanitary interests of the population of London would be best served by the amalgamation of all the existing companies. This is, however, a large and very important subject, and we propose to return to it on the eve of the introduction of the Bill.

## RAPIDITY OF THE PROPAGATION OF NERVOUS EXCITATION IN MAN.

FRESH investigations upon this point, by MM. Place and Helmholtz, are recorded in a recent number of the *Centralblatt*. M. Place adopted the same method as that formerly suggested by Helmholtz. The cylinder employed for registration was that constructed by Heynsius for the Leyden physiological laboratory, and was carefully planted in such a manner as to avoid accidental vibration. The measurement of the time was estimated by a coincident tracing from a vibrating tuning-fork. The median nerve was irritated first where it runs in the bicipital groove, and afterwards at the wrist, where it runs on the ulnar side of the musculus flexor carpi radialis, the distance of the electrodes being about 300 millimetres, or above one foot. The muscular contractions produced were strong, a more powerful current being required for the excitation of the nerve above where it lies deepest. In order to obtain trustworthy results, one or two minutes were allowed to pass between each experiment. The best observations gave a result of from 50—60 metres per second as the rapidity of propagation of motor impulses, with a mean of 53 metres per second. This differs considerably from the estimate of Helmholtz, who estimates it at only 33 metres per second. The point of excitation in Helmholtz's experiments was somewhat higher than in those of M. Place; and when Helmholtz's point was taken, a number (35·25 metres per second) not very different from his was obtained. Further investigations showed the general truth of Munk's observation, that the rapidity of propagation of impulses was much greater in the peripheral than in the central portions of a nerve. Helmholtz's observations were carried on with a new instrument, of which the idea was suggested by Fick. He found that variations in temperature exert an important influence on the rapidity of propagation of motor impulses, the rapidity being much greater in warm than in cold temperatures. He found also that when two induction currents are passed through, an interval of at least 1-500th of a second must elapse between them in order that the second stroke should produce an augmentation of the muscular contraction. If the period be less than this, the two act as a single shock; with an interval of 1-300th of a second the augmentation is very perceptible. Constant currents readily produce tetanus, especially when passed in a downward direction. Oscillations are felt in the muscle, the duration of which amounts to 0·09 of a second.

## THE SANITARY CONDITION OF LEICESTER.

FOR many weeks past the town of Leicester has been suffering from epidemic scarlet fever, and the general mortality has been extremely high. Scarlet fever has been very malignant, and there have been more than 150 deaths during the present quarter.

A public meeting has been held for the purpose of establishing a hospital for small-pox and scarlet fever, as these diseases are not admissible into the fever hospital or infirmary. Dr. Barclay's proposal to erect some small wards in the grounds of the infirmary, of which we spoke in terms of approval some weeks ago, was negatived by a large majority, apparently from the fear that the infection might extend to patients in the general wards.

We believe that the authorities will do wisely to look to the fundamental conditions of a good sanitary state. It is confidently affirmed that the sewers are exceedingly foul, that they are all but impervious, that from insufficient ventilation the gases escape into the houses through defective service drains, and that the single outlet is insufficient to take away the sewage when it is increased to any considerable extent by rain. Some time ago the subject of disposing of the sewage by irrigation was discussed; but, as usual, the landowners of the district are so blind to their own interests as to refuse to countenance the scheme. The Corporation is at this moment threatened with legal proceedings, the river Soar being in a very polluted state for many miles below the town.

## WASHING DECKS IN THE NAVY.

WE are glad to see that the *United Service Gazette* has called attention to the great discomfort, if not danger, experienced by the crews of many of her Majesty's ships, in consequence of the unnecessary and unhealthy practice of constantly washing the decks, even in the most severe weather. In the case of the upper deck there is the exposure of the men engaged, with bare feet and legs, for an hour or more at a time, at dawn or long before; and in the case of the lower decks there is the unhealthy dampness which hangs about all day, and is a fertile source of the

chronic rheumatism from which so many sailors are crippled before middle age.

In certain ships the practice is, however, of even greater cruelty, and leads, we have reason to know, to not a few deaths. These ships are the naval transports, which are employed in bringing home the troops from India *viâ* the Mediterranean. Soldiers on board a ship flying the pennant are, to a great extent, under the command of the naval captain, and are employed in many duties on board ship, and notably in washing decks. Is it wonderful that men who have been for years in the tropics should feel acutely the various vicissitudes of climate they pass through on their way to England, and should suffer from the exposure to cold and wet which constant washing of decks in inclement seasons necessitates? We believe that the medical officers of regiments recently returned from India could unhesitatingly trace many of the deaths and much of the invaliding which occur soon after a regiment's return to this country, to the needless exposure of the men on board the transports; and we hope that if the naval authorities still think it necessary to sacrifice men for cleanliness' sake, they will, at least, be prevented from sacrificing soldiers who have served their country well, and are about to revisit their native land after a lengthened absence.

## BREAD OR FLESH.

THE *Pall Mall Gazette* records a curious controversy said to be raging in Paris, about the propriety or otherwise of feeding horses upon bread, which, forage being scarce, is the only available provision for keeping the horses as a source of meat supply. Our contemporary states the daily amount of bread that a horse requires, and the quantity of meat that he is likely to yield; and goes on to say that a good deal of arithmetic has been done upon the question, and citizens, horses, and bread have been multiplied, divided, subtracted, and added, until the ministry are quite perplexed. The whole difficulty must surely be the invention of one of the ingenious gentlemen who fabricate balloon-post letters while they sit at ease in their London homes. The solution would so obviously turn upon the quantity of flour stored in Paris, as compared with the quantity of other kinds of provision, and with the number of horses, that no one acquainted with these data could hesitate in his conclusion for a moment.

## SNAKE-POISONING IN INDIA.

IN the early part of the present year Dr. Fayrer addressed a letter to the political agents of various districts in India, asking for returns showing the number of known and recorded deaths from snake-bite during the preceding twelve months. Prompt and ample replies were sent from a number of gentlemen, quite sufficient to prove that the mortality from snake-bite, over parts of India equal to about half the area of Hindoostan, is in each year really alarming, amounting to 11,416 recorded cases, made up of 6645 in Bengal, including Assam and Orissa; 1995 in the North-west Provinces; 755 in the Punjab; 1205 in Oude; 606 in the Central Provinces; 90 in Central India; and 120 in British Burmah. Dr. Fayrer thinks there must be at least 20,000 deaths annually in the whole of Hindoostan. In order of destructiveness, the cobra takes the first place, and the krait, or Bungarus cæruleus, second. Much of this mortality is evidently preventable, and we observe that Dr. Fayrer agrees with Dr. Shortt's suggestion, to offer rewards for the destruction of venomous snakes; but in order that this warfare may be carried on successfully, he thinks it desirable to make more generally known the appearance and habits of the Thanatophidia, circulating plain and faithful representations of each species in colour, such as every medical and police officer may be able to use for at once distinguishing venomous from innocent snakes, and for imparting to the intelligent native subordinates the knowledge necessary to the same end.

## THE ISOLATION OF DISEASE.

WE have received a copy of the *Manchester Examiner and Times*, for the 3rd ult., containing a letter from Dr. Hardie on the subject of the spreading diseases. This letter enters into the practically important aspects of contagion at much length, and with great perspicuity; and points out the need for isolation as the only means of preventing spreading, and the inadequacy of private benevolence as a source of supply of the necessary establishments and funds. Dr. Hardie's main conclusions may be stated as follows:—

"That no attempt should be made to increase the number of fever beds in general hospitals; but that, in the case of scarlatina, the proposal should rather be discouraged.

"That the whole subject is one belonging peculiarly to the functions of the municipal authorities, and that it would be futile to leave it to private charity to carry it out.

"That, as matters at present exist in Manchester, the Council should first make an experiment with the beds at present unoccupied in the general hospitals.

"That a special fever hospital should then be erected under the auspices of the Council, and be supported by a public rate."

In so far as these conclusions are general, they will command the assent of all who are conversant with sanitary matters; and we are glad to learn that they have become the subjects of local attention. We hear that the Manchester Sanitary Association is about to memorialise the municipal authorities in support of Dr. Hardie's views, which also receive intelligent advocacy in the leading columns of the newspaper in which they appeared. *The Times* has lately, on several occasions, spoken plainly about the importance of sanitary questions; and, when the general press takes this tone, we may fairly hope that, in a few years, an impulse will be communicated to public opinion.

## SANITATION AT COLCHESTER.

WE print elsewhere a letter from Dr. Bree, in which he calls attention to the unfortunate site that has been chosen for a hospital for infectious diseases at Colchester; and in which he tells the story of the way in which this site has been "approved" by a non-medical inspector of the Poor-law Board, and how the Medical Department of the Privy Council declines to be made a court of appeal against the decision of Gwydyr House. This is an excellent illustration of the general character of English sanitary work, and of the results which have been brought about by the lamentable disregard of science that so generally characterises our public men. They live so much in an atmosphere of opinion, and they are so apt to see the natural consequences of political jobs obviated by some rough kind of compensation, that they have little conception of the nature of facts, or of the inevitableness of the sequence of events that follows the violation of a natural law. To the average politician it would seem that a barrister nominated by the Poor-law Board would be just as likely as anyone else to select a proper locality for a pest-house; or, in other words, he would carry one step farther the conception of Dogberry—that reading and writing come by nature. In one respect we think that Dr. Bree somewhat exaggerates the evil that he denounces; because, whatever be the nature of contagion, it is tolerably certain that it may be destroyed by disinfectants, and not suffered to float upon the air to even neighbouring buildings. It is quite true, however, that

from the green tree we may argue to the dry. It may be regarded as almost certain that a pest-house planned in the way Dr. Bree has described would be managed with an analogous degree of discretion, and that poisonous miasms would be suffered to escape from it in every direction, until at length all Essex would become convinced of the futility of what it would be taught to regard as "sanitary precautions."

## MR. CHURCHILL.

WE understand that, at the close of the present year, Mr. John Churchill, the senior partner and the founder of the well-known firm of medical publishers, will retire from the business, which will for the future be carried on by his sons, Messrs. John and Augustus Churchill. Mr. Churchill's health and advancing years have for some time, we believe, prevented his taking more than a nominal share of business duties; and he will now withdraw from an active connexion with the profession of more than thirty years' standing.

We cannot allow the retirement of a gentleman who was once closely connected with THE LANCET as its publisher, to pass without paying a tribute to the integrity and energy which have always distinguished Mr. Churchill's business relations. Doubtless, in one sense, Mr. Churchill, like every other publisher, may be said to have thriven upon the brains of the profession; but it cannot be said that he ever took an unfair advantage of an author, and we believe that many successful practitioners owe much to his intelligent and discriminating assistance. Always a warm supporter of all the charities of the medical profession, we have reason to know that Mr. Churchill's private benevolence to cases of professional distress has fully equalled his public efforts; and we now wish him many years' enjoyment of his *otium cum dignitate*.

## THE VACANT CHEMICAL CHAIRS.

THE chair of Chemistry at King's College, which was rendered vacant by the lamented death of Dr. Wm. Allen Miller, has been filled by the transfer of Professor Bloxam from the chair of Practical Chemistry, which he has filled since 1856. Mr. Bloxam is favourably known by the work he has done both at King's College and at the Woolwich Laboratory, and by his works on Chemistry and Practical Chemistry.

The vacancy at St. Bartholomew's Hospital, caused by the death of Dr. Matthiessen, was filled on Tuesday last by the election of Dr. Russell, lecturer on Chemistry at St. Mary's Hospital. Dr. Russell was formerly assistant to Professor Williamson at University College, and succeeded Dr. Matthiessen at St. Mary's. He now again follows in his steps, and will find at his new school a wider field for his powers.

## SMALL-POX IN LONDON.

WE regret to find that the last official return shows no diminution in the fatality of the small-pox epidemic, the deaths last week having been 61, against 60 in the previous week. More than half the fatal cases continue to occur in the Eastern districts, part of the district of Shoreditch alone contributing 15 deaths from small-pox out of a total mortality from all causes of 63. It is as remarkable as it is discreditable to two of them, that, taking our seventeen largest cities and towns, containing over six millions of inhabitants, the aggregate number of deaths in them from small-pox during the last five weeks was 312, out of which London yielded 247 and Liverpool 53, thus leaving only 12 for the other fifteen towns. In point of fact, there were no fatal cases last week in either of the cities or towns save London and Liverpool, and this is by no means an exceptional instance.

It has been arranged that the large iron wards erected last year at the London Fever Hospital for the reception of cases of relapsing fever shall be at once removed to Hampstead, and re-erected in the grounds of the hospital belonging to the Metropolitan Asylums Board, for the accommodation of small-pox patients. It will be necessary to provide a new foundation, on account of the irregularity in the surface of the Hampstead ground.

## THE DISPOSAL OF THE SEWAGE OF RICHMOND.

A DEPUTATION of the Richmond vestry has had an interview with the Hon. Charles A. Gore, Chief Commissioner of Woods and Forests, for the purpose of requesting permission to rent or buy 200 acres of the old Deer Park, on which to dispose of their sewage by irrigation. Colonel Burdett pointed out to the Commissioner that they had been compelled to divert the sewage from the river, and that they laboured under the difficulty of being entirely surrounded by the river and by Crown lands. Mr. Gore, however, declined to accede to the request on the ground of the proximity of the park to the Royal Gardens at Kew, and to the town of Richmond. He expressed his belief that sewage irrigation would be a nuisance to the visitors in the gardens, and to the inhabitants of the town of Richmond.

We should like very much to know upon what evidence the honourable Commissioner's opinion has been formed. Has he really investigated the matter thoroughly, or has he simply acted as a Crown Commissioner, whose first duty is to maintain the *status quo*, no matter how much the public interests may suffer? The honourable Commissioner appears to be very careful lest the inhabitants of Richmond should be troubled with any new nuisance, apparently forgetting that they are already on the horns of a dilemma, being forbidden on the one hand to put their sewage in the river, and, on the other, on the land. It will remain to be seen whether the Crown enjoys any special privileges. The inhabitants of Richmond must have land on which to dispose of their sewage, and, what is more, it must be Crown land. So the sooner the honourable Commissioner realises the fact, the more creditable will it be to his intelligence. If not, the vestry must appeal to Parliament, which has more than once determined that land must be had for irrigation, and, if not voluntarily, by force.

## DEATH IN THE STREET.

UNDER this title a Mr. Cowper writes to *The Times* to give an account of the illness of a man who fell down in Oxford-street on Sunday evening, and then, or shortly afterwards, died. Mr. Cowper states that he picked the man up, sent for the police, and advised "an application at the nearest doctor's shop." The policeman, however, raised the question, "Who was to pay the 7*s*. 6*d*.?" Such a case as this should surely be brought under the notice of the Chief Commissioner. The policeman was wrong in his amount, because the fee for attendance when summoned by a constable is 3*s*. 6*d*. in the daytime, and 7*s*. 6*d*. at night. Seven o'clock in the evening could not be called night; and the Act which prescribes these fees of course prescribes also the fund to which they are chargeable. It is rather too bad that the police should suffer people to die in the streets for fear of responsibility in the matter of such moderate expenditure.

To Mr. Cowper, and to the public, we would give just

this advice,—that on any similar occasion they should let a fallen man remain recumbent, turning him well upon one side, and bending the neck so as to bring the chin towards the chest. This is the best position for recovery from any state that produces unconsciousness; and there are many conditions in which to raise the patient to an erect posture would simply be to sign his death-warrant.

## DR. RICORD.

IN the terrible sortie of November the 30th, the most distinguished services to the wounded were rendered by Dr. Ricord. Having established his head-quarters in a ruined hut, he awaited the arrival of the *brancards* with their unhappy freight. As each poor sufferer was brought in, he gently but rapidly relieved him of his clothes, dressed his wound, or applied the splint to his shattered limb, as the case might be, placed him on his shelf, and had him conveyed by ambulance waggon to the steamers which were moored on the Marne, by Joinville. As soon as the boat had taken in as many as it could hold, it steamed swiftly down stream to the bridge near the Bastille, whence the *brancards* bore the patients to the hospitals or to the private houses which had been prepared for their reception. For hours and hours Dr. Ricord continued thus to exert himself: according to one eye-witness, he "created amazement by his ubiquity." The doctor's seventieth birthday was on the 10th of this month; and in the energy he displayed he adds another to the list of able and vigorous septuagenarians on whose prolonged career of usefulness we lately commented.

## THE CONTAGIOUS DISEASES ACTS COMMISSION.

THE Commission has been taking evidence on Wednesday and Thursday of the present week, and intends, we understand, to pursue its inquiry with vigour immediately after the Christmas holidays. The inquiry will be a wide one, and will include investigations on the expediency of extending, maintaining, or repealing the present Acts. Several medical men will be examined, as well as those who have taken part in the recent agitation for or against the continuance of the Acts. On Wednesday the metropolitan police officers at Devonport were examined, and on Thursday the Inspector of Certified Hospitals, Mr. Sloggett, whose evidence showed how completely successful the Acts have been in diminishing disease among the men and women subjected to them. An attempt was made to prove that acts of immorality have increased among the soldiery through the Acts, even in face of the acknowledged decrease in the houses of ill-fame, the abandoned women, and in the amount of disease among them.

## THE CATTLE PLAGUE AND ITS PROGRESS.

SINCE our last article, we regret to say that a fresh outbreak of cattle plague has occurred in Belgian Luxembourg, having been discovered in the hamlet of Signeulx, commune of Bleid, about six kilometres from Virton. It is also prevalent at Sapogne, a French village, distant only two kilometres from the commune of Villers-devant-Orval. The Governor of the Province of Luxembourg has therefore forbidden, in the commune of Bleid, in a absolute manner, all assembling and all traffic of cattle and sheep.

This further spread of the disease proves the wisdom of the step taken by the Privy Council, in prohibiting the importation from Belgium of cattle, sheep, and goats to this country, except under the restrictions mentioned in our article of the 3rd inst.

## THE CLINICAL SOCIETY.

THE discussions of the Clinical Society continue to be of a usefully practical character. An interesting debate took place on the 9th ult. on the merits and safety of hypodermic injections, and a committee was appointed to report upon the subject. A still more animated conversation resulted on the reading of the report on a case, brought forward some weeks ago by Mr. Thomas Smith, of ulcer following vaccination. We have not, for obvious reasons, given a verbatim account of this last discussion, which is adjourned until the next meeting of the Society, on the 13th January in the coming year.

## HEALTH OF HAMPSTEAD.

IT is extremely satisfactory to hear that the death-rate of the parish of Hampstead has been a little under 17 per 1000 during the past year, and this in spite of the erection of the hospital for fever and small-pox, in which 16 deaths have occurred. With respect to the alarm naturally felt by the inhabitants at the introduction of fever and small-pox, Mr. Lord, the medical officer of health, reports that the most active measures are in force to prevent the extension of these diseases, by fumigation, disinfection, &c., and hitherto apparently with the most successful results.

## THE GENEVA CONVENTION.

IT is abundantly clear that the terms of this treaty will have to undergo some very important modifications and amendments before the Governments of the different powers will, in future, consent to be bound by it. Both sides are loud in their complaints of the infractions of the terms of the Convention; and there can be no doubt, we think, that the Red-cross system has been the source of mutual heartburning and abuse, as a "set-off" against the good that has been effected under it.

## THE STATE OF THE FOUNDATIONS, SEWERS, AND CLOSETS OF LIVERPOOL.

PROFESSOR HUXLEY, having been requested by the Town Council of Liverpool to nominate two gentlemen to report on the propriety of using ashpit refuse as the foundation of new houses in Liverpool, has nominated Professor Parkes, of Netley, and Dr. Sanderson, of University College. The Town Council have further resolved to take the opinion of these same gentlemen on the sanitary condition and ventilation of the sewers, and the working of trough water-closets. We need not say that this nomination has our entire approval. We regard it as a most satisfactory evidence that our Report has not been made in vain.

## THE RUSSIAN HOSPITAL FOR THE GERMAN ARMIES.

TOURISTS will readily call to mind the locality on the Rhine, near Coblentz, well known for many years as a seat of the Moravian schools. There is now at Nieuweid a large military hospital, under the charge of a Russian military surgeon from St. Petersburg, Dr. Heyfelder. We are indebted to a recent visitor to Nieuweid for the following description.

The establishment consists of marquees and huts situated in the park of the Prince of Weid. Two of the marquees are those used in the Russian service, having been sent by the Czar for the purpose. They are very large, being calculated to accommodate forty patients each. The huts, built of brick and wood, are lofty, and furnished with long windows reaching as high as the roof of the structure. Altogether there were some 150 wounded men under treat-

ment at the time of our informant's inspecting the hospital, about forty of whom had been especially selected at Metz after the capitulation of the garrison, on account of the scientific interest attached to the observation and treatment of their cases.

## THE CHARGE OF NEGLECT AT THE GREAT NORTHERN HOSPITAL.

IT has been stated, with regard to the little girl who was discharged from the Great Northern Hospital with injuries resulting from a burn, who subsequently died in the Royal Free Hospital, that the inquest was adjourned for further evidence, as the fatal result appeared to have been accelerated by the course adopted at the former institution. We have made careful inquiries into the case, and have ascertained facts which, we believe, will clear the Great Northern Hospital of the imputation which has been laid upon it; but as they will probably be made public at the adjourned inquest, we reserve any further remarks on the subject.

## A COTTAGE HOSPITAL AT DEVIZES.

A COMMITTEE has been lately formed at Devizes with a view to the establishment of a cottage hospital, having some working connexion with the existing dispensary in that town. It is decided to erect a building consisting of a central block for offices, dispensary, day-room, kitchen, &c., and a pavilion ward on either side for three beds. It is also proposed to erect a detached ward for the reception of fever cases. It is calculated that a building fund, amounting to £800, will be required, and a future income of at least £200 a year to meet current expenses.

## EXPLOSIVE BULLETS.

IT will be remembered that the belligerent powers—France and Germany,—previous to the commencement of the present struggle, had agreed to discard the use of these explosive projectiles in warfare. The papers, notwithstanding, contain accounts of the use of these bullets; but as the French and Prussians have each preferred complaints on this score against the other, we may believe that they have not been employed at all, or, at any rate, only very exceptionally indeed.

A PARLIAMENTARY RETURN has just been issued (in correction of an imperfect one previously published), showing the number and constitution of the several local boards in England and Wales acting under the authority of the Public Health or Local Government Acts, and also the number of districts under Improvement Commissioners or Local Acts. This document contains statistics which persons engaged in sanitary inquiries frequently want, and which are not generally accessible outside official circles.

A COMMITTEE is being appointed to make the necessary arrangements to receive the British Association in Edinburgh in August next. Professor Christison stated that the Council of the Royal Society had agreed to recommend the Society to subscribe £100 towards the fund. It is understood that a sum of not less than £1500 will be required to enable the local committee to carry out their object.

THE Chair of Political Economy and Jurisprudence in Queen's College, Galway, vacant by the resignation of Professor Cairnes, has been conferred on Mr. Lupton, late Registrar. As a consequence of this change, Dr. Moffett will hold the office of Registrar, together with the Chairs of English Literature and Mental Philosophy.

A MEETING of the Branch Council for England was held on Thursday, the 15th inst., at 32, Soho-square. This was the first occasion on which Mr. Quain appeared as the representative of the Royal College of Surgeons of England, and that gentleman was duly introduced, and took his seat.

AT a late meeting of the guardians of the Skibbereen Union, it was carried unanimously that Dr. Donovan, late medical officer of the workhouse, should receive a superannuation allowance equivalent to two-thirds of his salary.

IT is stated, we hope on good authority, that the Workshops Regulation Act is at last about to be adopted in Birmingham. Better late than never.

OUR fourth report on the Sanitary Condition of Liverpool, having reference to "the interiors and the people," is unavoidably postponed until next week.

## SMALL-POX IN THE METROPOLIS.

AT the meeting of the Epidemiological Society on Wednesday evening, Dr. Seaton, the President, delivered an important and interesting address on the subject of the present epidemic of small-pox in the metropolis. He said that its arrival had not been unlooked for, since, in the ordinary course of events, London was so visited about every three years. Taking the last twenty years, there had been metropolitan epidemics of small-pox in 1851-2, 1855-6, 1859-60, 1863-4, 1866-7, and now in 1869-70. In other centres of population the interval between successive small-pox epidemics frequently amounted to four, or even five years; but in London the accumulation of susceptible persons was more rapid than elsewhere. On the present as on former occasions, the Eastern districts had been those that had chiefly suffered, because in them, for various reasons, there had been considerable trouble about vaccination. In the first place, some of the unions had been undergoing various processes of reconstruction, or of amalgamation with others, which had interfered with the completion of permanent arrangements for carrying out the Act of 1867; and besides this there had been difficulties with the Poor-law Board as to the fund to which certain expenses were to be chargeable. The general result was, that while in a few unions the Act had been promptly carried into effect, in others two precious years had been almost or altogether lost. To these unions, however, on the 20th March, 1870, a strong letter was sent through the Poor-law Board by the Privy Council, setting forth that their neglect of the law could no longer be tolerated; and the consequence was, that inspectors had been appointed, and that a better state of things than had hitherto prevailed might be expected to be brought about. The worse unions were those of Bethnal-green and Mile-end Old Town, in which the guardians had shaken hands with the promoters of the so-called Anti-Vaccination League, and nearly half of the small-pox mortality had been in those two parishes. During the nine weeks of the current quarter 281 deaths from small-pox had been registered in the Eastern district, and 135 of these had taken place in Bethnal-green and Mile-end Old Town. During the epidemic of 1866-7, 221 deaths occurred in Bethnal-green; where, indeed, the disease almost always existed. When the inspector was first appointed, he received a list of 4000 children, about whom no return had been made; and he was expected to inquire into all these cases by devoting two or three hours a day to the work. It was a curious feature of the agitation

against vaccination that, when it became known that there were these 4000 cases to be inquired into a statement was published that there were 4000 persons in Bethnal-green *who objected to have their children vaccinated.* The fact was, that there probably were not four who objected when once the matter was brought home to them. Amongst the unions that had carried out the Act thoroughly he might mention Poplar, St. Luke's (Middlesex), and the Clerkenwell division of Holborn; and he ventured to predict that, when the epidemic was over, and its history could be written, it would be found that these two unions, and others like them, had reaped the benefit of their prudence. In former years Poplar had suffered severely. In the epidemic of 1863 it returned 97 deaths; in 1866, 93; and in 1867, 112. In the present quarter it had contributed only 11 to the total 281 of the Eastern unions. In St. Luke's, in the decade 1850–60, the mortality was higher than in any other London parish; but in this epidemic it had been very small. It would curiously illustrate how little real difficulty there was in carrying out the provisions of the Act, if the returns from this parish were glanced at. The births there averaged about 1000 in the six months. In the return for the six months preceding, made in January last, there were 174 children whose vaccination certificates had not been sent in. When these cases were inquired into by the inspector, it was found that four were in course of vaccination, 20 had been vaccinated, but not yet returned, 2 held certificates of insusceptibility to the vaccine disease, 48 held certificates of temporary unfitness for vaccination, 3 had died, 96 had removed from the district, and there remained only one case of intentional default. In Manchester, the head-quarters of the League, the inspector had cleared his list without a single prosecution. In Leeds, for the year ending March 31st, 1870, there were registered 5499 births. The vaccination certificates were returned to the registrar for 4681. Of the rest, the inspector found that 36 were temporarily unfit, 104 had left the district, 520 had died after registration but before attaining the age of three months, 156 died before registration, so that birth and death had been registered together, and only two cases of intentional default remained, in one of which the father was a "medical botanist" who made capital in his trade from his delinquency. In conclusion, Dr. Seaton referred to a recent visit that he had made to Paris, and to the recent or present epidemic of small-pox there as the natural result of a neglect of vaccination that he characterised as "appalling." Up to the time at which authentic returns had been received, the deaths had amounted to between 200 and 300 weekly. The siege had driven into Paris a large unprotected population from the environs; and it was said that the mortality had since risen to 400 weekly. During the last twenty years there were only seven quarters in which the small-pox mortality of London, for the whole quarter, had risen to such a height.

Mr. MARSON, who was called upon by the President, said that the Small-pox Hospital had received this year about 1200 cases, and had been compelled during the last three months to refuse many. A temporary hospital, with 120 beds, had been opened at Haverstock-hill, and now contained 74 in-patients. The general mortality of the epidemic had been about 13 per cent., and ten cases imported from Paris had been received.

## INSIDE PARIS.

WE have received intelligence from inside Paris by *ballon monté* to the 10th inst. To the credit of human nature be it said, our correspondent cannot divest himself of a sense of responsibility, or a strong feeling of sympathy with those among whom it has been his good or bad fortune to find himself. He commences his letter by expressly declining to give any information likely to be of any use to the enemy; but what he does say may, we believe, be considered as quite reliable. Considering that it was the eighty-fourth day of the siege, matters in Paris were, in his opinion, far less desperate than might have been expected. Food is, no doubt, scarce, especially meat, which costs fifteen or sixteen francs a pound. Horse-flesh fortunately seems to agree very well with the troops, which is more than can be said of it in the case of civilians, who complain of indigestion after eating it a few days. It will be seen that this information is in accord with the statements that have appeared in the papers, to the effect that Paris may hold out for some time yet. The results of the late battles have been very serious. The men fought well. Considering the size of the city, and the variety of classes and interests composing the population, diverse opinions are, of course, entertained and expressed; but there does not appear to be any doubt as to what is the feeling of the Parisians as a whole. They have every confidence in Trochu, are animated by a good spirit, and prepared to do all in their power, and to undergo a good deal of suffering for what they consider a good and just cause.

There are believed to be upwards of 5000 wounded in Paris altogether, many of whom are not, however, seriously injured. Among the wounded, nevertheless, there are numerous cases of very grave and complicated injuries. As for matters of sanitation, there does not appear to be much attention given to them; but great ingenuity is displayed in the construction of surgical apparatus and the adaptation of various appliances for the comfort or relief of the wounded. The occupants of private houses have come forward, and placed a very large number of beds at the disposal of the Provisional Government for the reception of wounded and sick soldiers. Operations of all kinds have been very numerous—from excisions and amputations down to the simple extraction of balls. Tetanus has manifested itself in some cases, and gangrene has not been of infrequent occurrence; but our correspondent remarks that it is *not* hospital gangrene, from which we presume that it has shown no disposition to spread among the cases in the surgical wards. Erysipelas and pyæmia have likewise prevailed, but not to a greater extent than might fairly have been expected, considering the number of cases undergoing treatment. Small-pox, which had been prevalent, was declining; but fevers (such as typhoid fever), intestinal disorders, and pulmonary diseases, probably owing to the character and insufficiency of the food and the accession of very cold weather, were on the increase.

Our correspondent concurs with all who have written about the medical administration and system of intendance in the French army in condemning both. The army medical officers appear to have very little voice in the arrangements; and for lack of this, with the very highest professional skill that Paris can afford, there is defective organisation and mismanagement, owing to civilians and amateurs being unacquainted with the best methods of effectively succouring the sick and wounded.

# Correspondence.

"Audi alteram partem."

## THE LANCET MEDICAL ACT AMENDMENT BILL.

*To the Editor of* THE LANCET.

SIR,—On reading attentively your Medical Bill, it has occurred to me that some parts of it require amendment. The proposal of "Vigilans" in your last number, that irregular practice should be put down by the Act in the manner he suggests is of as much importance to the well-being of the profession as reform in other respects. The public have no idea of the damage done to the profession, as well as to themselves, by these pretenders, and I am very happy to find there is at last a prospect of their being put down by the strong arm of the law. Let it be done thoroughly; let there be no loophole left; no room for difference of opinion or doubt.

It appears to me that Clause 28, relating to foreign and colonial practitioners, should be expunged altogether. We know very well that in some foreign countries, particularly in the English-speaking United States of America, some colleges grant medical degrees after a mere nominal examination, their object being to attract students in this way to their schools. Now, what is to hinder shoals of our students going over there and coming back naturalised Americans,

with their degrees in their pockets, and demanding registration in this country without examination. If any foreigner or colonist wish to practise in this kingdom, let him undergo the same examination as British medical students, and by the same examining boards.

I think your Bill deals very leniently with the "medical authorities," by which I presume you mean the medical colleges and schools. Let them by all means send four members to the General Medical Council. But I see no reason for allowing them to grant medical degrees at all. The colleges might consider it a hardship to lose the examination fees. A share of the examination fees of the new examining boards, or of the cost of the licence, might be given them in proper proportions, and the fees could be fixed sufficiently high to compensate all parties fairly. At present the University of Aberdeen charge £15 15s. for their degrees (£5 5s. at each of the three examinations), and the University of Edinburgh £25—at least, it was so when I studied in Edinburgh. In future, let the pass fees, or cost of the licence, be £25, or £30, or £35, which I should think would produce enough to compensate all.

Two degrees might be granted by the new examining boards—namely, Licentiate of Medicine and Surgery, and Doctor of Medicine and Surgery; for the latter degree a more extensive course of study and a severer examination should be required.

I am, Sir, your obedient servant,

Kingussie, Dec. 6th, 1870. J. C. ORCHARD.

*To the Editor of* THE LANCET.

SIR,—At a meeting of the Central Somerset Medical Society, held here on the 8th inst., a resolution was passed as follows:—

"That the thanks of the members of this Society are due to the Editor of THE LANCET for a Draft of a Bill to amend the Medical Act of 1858; that this Society accepts it as an instalment that his endeavours will eventually lead to the formation of a central examining board for exclusively conferring degrees."

I am, Sir, yours faithfully,

H. C. WALKER.

Shepton Mallet, Dec. 12th, 1870. Tr. and Sec., Cen. Som. Med. Soc.

## SANITARY SCIENCE AT COLCHESTER.

*To the Editor of* THE LANCET.

SIR,—Every week you report the spread of scarlet fever, small-pox, and other contagious diseases. Your correspondents write to you very learned letters about the mode in which such diseases spread, but few of them notice the fact that the so-called sanitary reformers and inspectors have themselves very much to blame.

In this town of Colchester the Board of Guardians have erected a hospital for the reception of contagious diseases, which has the following admirable facilities for spreading the disease among the inhabitants:—1. It is thrust in, as it were, between the east side of the Workhouse and a row of cottages, eighteen in number, inhabited by poor people, the end of the pest-house being forty feet from the nearest cottage. Beyond this row of cottages is the public road, in a hollow, and rising above the road are the gardens of one of the most populous parts of Colchester. 2. Abutting on the pest-house on the west is the playground of the poor children of the Union; and close to it is the pay-room, where the poor congregate to get their allowance. 3. To the north, about one hundred yards or so from the pest-house, is the public water-works, with a large open tank, which supplies the town with water. Beyond, half a mile off, is the Idiot Asylum, but there is hardly any break in the intermediate houses. 4. To the south there is a continuous street of thickly-inhabited houses, communicating with the principal thoroughfare of Colchester.

After this pest-house had been raised above its foundation, the inhabitants of the cottages demurred, through their landlord, to the erection of such a building within twelve yards of their bedroom windows, and the guardians requested the opinion of myself and the medical officer of the union as to the eligibility of the site, and we both condemned it. But it appears that a non-medical Poor-law Commissioner had approved the site, and the guardians determined, spite of our opinion, to continue the building. The subject was brought before the Commissioners of Lighting and Paving, and in consequence of their representation the guardians requested the Poor-law Board to send down a sanitary inspector. Of course the sanitary inspector would not disturb the site sanctioned by one of his board, and so the building went on. The Commissioners of Lighting and Paving now applied to the Sanitary Board of the Privy Council, forwarding to them a memorial against the building, signed by 70 immediate inhabitants. The Privy Council, however, wrote to say that, the place having been inspected by a sanitary officer of the Poor-law Board, they declined to interfere.

Now, Dr. W. Budd has *proved*, and every educated medical man of experience *knows*, that infectious diseases are conveyed by atmospheric currents from the sick room to healthy places all around them, to a distance, according to Dr. Budd's deduction, of at least a mile and a half. But instead of studying the practical, our so-called sanitary reformers are enveloping themselves in a fog of microscopic gemmules, which they think may probably be the *vera causa* of infection; and while they are fighting about these gemmules, they permit manufactories of contagion to be erected amid the residences of our helpless poor. The effect of the building at Colchester on the minds of intelligent people is, that the whole system of sanitary reform may be comprised in the word "humbug." And, with all deference to constituted authorities and Poor-law guardians, I am very much of the same opinion.

I am, Sir, your obedient servant,

C. R. BREE, M.D.,

Colchester, Dec. 10th, 1870. Senior Physician to the Essex and Colchester Hospital.

## SKIN-GRAFTING.

*To the Editor of* THE LANCET.

SIR,—Much has been written of late on skin-grafting. From my own experience of it in the hospital here, I can corroborate every statement that has been made on the subject. I think the practice of it is of immense consequence in the treatment of ulcers, particularly in the treatment of extensive granulating sores following burns, &c. It is quite unnecessary, however, to put the patient to the pain of cutting a piece of healthy skin from the body for the purpose of transplanting it on the sore. All that is necessary to be done is, to take a long bistoury, or razor, and shave or scrape off the epidermic scales from the convex parts of the extremities, such as on the outer and convex aspects of the forearms and thighs, and place them on the healthy granulations. This can best be done by brushing the scales off the bistoury with a camel-hair pencil. After securing them *in situ* for three or four days by means of common adhesive plaster, the granulations on which the epidermic scales were placed assume a glazed bluish appearance, which gradually grows into skin, and meets the nearest edge of the healing ulcer, which edge shoots out, and meets the newly-formed skin on the granulations. The result is a continuity of healthy skin. Such has been the result of the practice here, and it is not necessary for me to enlarge on the advantages of it.

It has been mentioned by some of the writers on skin-grafting that the formation of the new skin is accounted for on the cell theory. I have no doubt that it is so, for, according to the observations of Schwann on the theory of the growth of the epiderma, these scales are nothing more than dried cells having a nucleus in them, though it is stated that they are scarcely apparent. Mr. Erasmus Wilson, too, states, in his work on Diseases of the Skin, that the formation of the epidermal scales results from the desiccation of the cells. Now, if the scales are scraped off the skin and placed on healthy granulations, and kept on them for a time—say four days,—is it not possible that the scales may imbibe serum from the plastic lymph on the granulations and adjacent tissues, and form cells, which ultimately go to the formation of skin? At all events, the practice of placing epidermal scales on a healthy granulating sore causes it to heal or skin over more rapidly, not only from the edge, but also in the centre of it.

I may mention that my colleague, Professor Pirrie, in his work "On the Principles and Practice of Surgery," makes mention of a case he had in which a large isolated portion of skin formed in the middle of an ulcer, and gradually increased in size till it joined that formed from the circumference of it. It is quite possible that the isolated piece of skin might have grown from an epidermal scale which had accidentally fallen on the ulcer.

I am, Sir, your obedient servant,

DAVID FIDDES,

Aberdeen, Dec. 5th, 1870. Surgeon to the Royal Infirmary, &c.

## THE SURGERY OF THE WAR.

(FROM OUR SPECIAL CORRESPONDENT.)

(*Continued from p. 619.*)

WHEN considering the results of treatment, it must be remembered that for days before and during the three days of the battle (of Sedan) the soldiers of the French army had been fearfully underfed, while at the same time they were undergoing the greatest possible physical strain in a prolonged fight, ending in a disastrous and most depressing defeat. They commenced, therefore, in an already weakened state to undergo one of the most exhausting of all illnesses, and, moreover, from the enormous mass of wounded and prisoners suddenly thrown on the hands of the Prussians, it was impossible to find them more than sufficient food to maintain a bare existence. Under these circumstances it can scarcely be wondered that conservative surgery, especially of the lower limbs, did not meet with the success which might have been hoped for. Large numbers of cases of compound fractures of the thigh and leg, in which an attempt had been made to save the limb, were sent in by the German surgeons, and by far the greater number of these cases ended in amputation; and, unfortunately, too often in death. The weak state of the patients was again seen in the secondary amputations, many cases occurring in which the flaps sloughed in whole or in part, and in the few who survived, union was very slow, and accompanied by profuse and offensive discharge. Considering the wounds independently of the injury to the bone, the same treatment was adopted in almost all cases. From the commencement, all foreign bodies having been removed, they were dressed with a watery solution of carbolic acid (about 1 to 50) whenever it could be procured. It was applied on charpie, or lint, covered with oil-silk, and lightly kept in place by means of a bandage. This dressing was comparatively powerless in preventing decomposition, as, from the heat of the body, the carbolic acid soon evaporated, leaving a simple water dressing. But yet the patients recognised its temporary value, and when their wounds were being dressed, frequently inquired if we had put any "acide phénique" in the water. The oily solution was but little used, owing at first to the want of oil. The only other means used to destroy the smell was carded oakum, and this was found most effectual. It might be almost soaked in pus for hours and yet remain perfectly free from any odour of putrefaction. When the wounds were suppurating freely, they were washed out daily with a solution of carbolic acid (1 to 50) injected freely into the wound by means of a syringe or irrigator. As may be readily imagined, however, these means failed utterly in preventing decomposition of the discharges in the deep parts of the wounds, so that in all cases at the daily dressing more or less fetor was found. This was especially noticeable in deep wounds of the thigh, particularly when there was only one opening with some accumulation of pus. As for dressing exactly according to Mr. Lister's plan, I saw none of it anywhere.

The want of drainage-tubes was greatly felt, scarcely any having been sent out from England. As a substitute, a piece of carded oakum twisted up into a string was used, but it seemed to me rather to obstruct than favour the exit of the pus. The only methods of treatment left, therefore, were early and free counter-openings, and enlarging the existing openings when necessary by means of tents.

In the treatment of the fractures there was little worthy of remark. The wire splints were found very useful, especially in fractures of the lower limb and in excisions of the elbow and knee. The want of plaster of Paris was greatly felt for the first month, and, from what I saw at Sedan and elsewhere, I believe conservative surgery in fractures of the leg to be hardly possible without it, with the present mode of dressing.

I reached Sedan just in time to see the greater part of the secondary amputations and excisions, which were very abundant till nearly the end of September. At first they were all performed by Dr. McCormack, but afterwards this regulation was relaxed, and all ordinary operations were given up to the surgeons who had actual charge of the cases. The excisions in the upper limb were of course of a very irregular nature, owing to the shattered state of the ends of the bones. In one case Dr. McCormack excised both the elbow and shoulder on the same arm, but the man did not recover. As a rule, however, the excisions in the upper limb had fair success; but those of the knee were most fatal, not one, I believe, recovering. I heard the same everywhere of this operation. Stromeyer, who was near Sedan, was said to have done thirty-six without a single success; and, on the whole, this is not to be wondered at when we consider the exhausting nature of the discharge from the wound, the extreme care necessary to keep the bones in position, and the unfavourable circumstances in which these patients were placed with regard to diet and nursing. Unless some better results are reported from other surgeons, I should think the operation would be abandoned for the future in military surgery. Amputations in the upper limb were not common, but such as there were showed the usual favourable results. In the lower limb, on the contrary, scarcely an amputation recovered, death resulting from exhaustion and sloughing of the flaps, and frequently from pyæmia. In securing the vessels, torsion was considerably used, and with the best results. During my stay at Sedan I saw it successfully applied to the femoral in an amputation at the hip-joint, and to the same vessel in the thigh in several cases, and many times to the tibials. The dressing usually adopted for stumps was lint soaked in carbolic acid lotion, or a soft covering of carded oakum, which latter was found to answer extremely well, readily absorbing the discharges, and preventing any unpleasant smell. Secondary hæmorrhage was not very common. In one case Dr. McCormack ligatured the subclavian for hæmorrhage from a stump after amputation in the middle of the arm, and succeeded in arresting the hæmorrhage; but the patient, I believe, died afterwards. In another case the femoral was ligatured for hæmorrhage from a leg-stump, I believe with the same result. The general health of the hospital was at no time very good. During the first two weeks after the battle, diarrhœa, in some cases almost dysenteric, was very troublesome, causing directly and indirectly many deaths. This was supposed to be due in part to the pollution of the water by the bodies of the three Zouaves who fell into the well. The remedies most used and found most effectual were bismuth and chlorodyne, given either together or separately.

Pyæmia was almost unknown till towards the end of the third week, when it broke out severely, causing a great number of deaths. Erysipelas was only an occasional occurrence, and there was no hospital gangrene. During the first month there were, I believe, only two cases of tetanus, both terminating fatally. The drug used in both was hydrate of chloral, which at least served to ease the sufferings of the unfortunate men. The means adopted for the prevention and limitation of hospital diseases were all that could be desired. No sponges were allowed to be used in the dressing; all dirty dressings were taken out of the wards as soon as possible, and burned daily; no bandage was used a second time if at all soiled; the same charpie and water were never used to wash two different wounds; and carbolic acid was freely employed, both as a lotion for dressing the wounds and for washing them; and, moreover, it was frequently sprinkled about the floors and around the beds of the patients from whom there was the greatest discharge, and in some cases even on the beds. Above all, the greatest attention was paid to ventilation, the windows being constantly open, somewhat to the astonishment of some of the German surgeons who visited the hospital. The affected patients were, as far as possible, removed to the tents which had been left standing for that purpose. In spite of all this, after the first three weeks pyæmia was the great

cause of death. But yet I do not think that, under the same circumstances, any of our London hospitals would have been any better.

To sum up the results of my military experience at the hospital of the Caserne d'Asfeld, I should say that one thing seems to me perfectly clear,—that the one duty of military surgeons at the present time is to devote their attention solely to discovering the best means of preventing decomposition in wounds. I believe I can say with truth that decomposition of the discharges was, directly or indirectly, the cause of death in 70 to 80 per cent. of the cases lost at the Caserne d'Asfeld. Anyone who has had the dressing of a simple flesh-wound of the thigh, and has seen the half-pint of putrid pus, mixed with bubbles of fetid gas, coming daily from a deep sloughy cavity, burrowing in all directions, in spite of all efforts to keep it clean, and who has moreover experienced the irritation caused by the inoculation of such pus on his own person, will appreciate the danger of the patient, and that the best hope of successful treatment lies in prevention. And I cannot but believe that prevention is possible, and that some day our present treatment of gunshot wounds will be looked upon as no less barbarous than the boiling oil of John de Vigo, and as impotent as Ambrose Paré's oil of whelps.

## BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

THE horrors of the warfare which now rages on the Continent are not altogether confined in their distribution to the French and Prussian armies, but during the last few months they have visited, indirectly it is true, but in most tangible form, our usually peaceable town. It is no secret that our manufacturers are straining every effort to produce warlike material of all kinds, which finds its way to the seat of war. In fact, the pressure on this branch of our trade is enormous, unprecedented, and so great that everyone who can in any way engage in the manufacture of munitions has turned his hand to the profitable work. Your correspondent sent a little copy of "Xenophon" to be bound a month ago, but has not yet succeeded in getting it done, for "the men are all making cartridges." This surfeit of trade has had its disadvantages to counterbalance the profits, and we had one of the former yesterday. As I sat writing yesterday, I was startled by a roar as of artillery, a sound which only recent experience had taught me to interpret as the explosion of a cartridge manufactory. Such it proved to be, and one of unusual severity. In a shed in which about seventy women were employed filling chassepôt cartridges, about ninety pounds of powder exploded, and the fragments of humanity left can tell no tale of its happening. As soon as the flames could be extinguished, twenty of the bodies were gathered together—that is, the fragments were, heads and arms, legs and shapeless masses of charred flesh beyond all powers of indentification were collected to await the coroner's investigation. To the General Hospital were carried fifty-three other victims, in states more or less terrible, and of these, five died before many hours had passed. I saw the survivors to-day, and nothing more horrible can be well imagined than the appearances they presented. Their heads might be likened to big bladders of lard covered with soot. Not one-half of them have any chance of ultimate recovery, so severe are the injuries. In the same wards lie the remaining victims of another explosion, which occurred within a few yards of the spot where the one of yesterday happened, only three weeks ago, and in which nine were killed and twenty-seven grievously hurt. The General Hospital, large as its accommodation is, had it taxed to the utmost, and the sufferers had to be put up in the medical wards, in the chapel, and elsewhere, as places could be found. The kinds of injuries are not very various, but some interest is attached to the circumstance of all the sufferers being women, in that those pregnant have aborted, or are threatening to do so, thus adding a most serious complication to their already perilous condition. At one of the Society's meetings this week Mr. Bennett May showed some most interesting specimens from the duodena of the victims of the former catastrophe, and his museum is likely to be considerably enriched by like specimens from the late accident. Pyæmia is unknown in the General Hospital, and it will be interesting to watch what the effect will be on the results of its operative practice from the addition of the myriads of germs produced by the suppuration in these cases; for I may tell you that germicides are not in fashion here. Of course these catastrophes will lead to a long Government investigation, and possibly a blue-book; but whether there be blame attached to the proprietors of these works or not is here a very open question. I think it very unwise to have a lot of women working with such dangerous material without some responsible being to look after them.

The weather here is very severe, and for the last few days we have had very heavy snow on the ground; but as every branch of our trade is brisk to the utmost, the winter is not likely to be much felt. In medical matters we have only one change threatening, that being the election of Dr. Johnstone, the accomplished physician to the Queen's Hospital, to the vacancy at the Children's Hospital, created by the untimely death of Dr. Earle.

I have already said that germicides do not find favour here, and that was well shown at a recent meeting of the Midland Medical Society, when Mr. Gamgee introduced the subject by detailing his experience in a recent visit to Mr. Lister, at Edinburgh. The discussion was opened by Mr. Lawson Tait, who took Dr. Bennett's well-known objection to germs, and, while he admitted that he had obtained very good results from the last of Mr. Lister's many methods, said he had failed with the others, and that he had been quite as successful with styptic colloid, with collodion, and with nothing but the blood of the wounds. He believed that the prevention of the access of air was the secret of the success of the treatment, quite independent of germs. Mr. Furneaux Jordan followed in a similar strain, and the other speakers differed in no essential particular. I believe that a collection of cases bearing more intimately on this question will appear shortly in your columns, kindly communicated by some of our leading surgeons.

The question of hospital mortality formed the subject of an excellent paper by Mr. Harmar, read on Wednesday last, and it elicited from Dr. Heslop one of his telling and cultured speeches. He strongly inveighed against what he feared was a very prevalent carelessness in hospitals, in not securing that infection was not carried from necropsies, or from one patient to another. It was too late to carry on the debate to the extent it was desired, and it was therefore adjourned on the motion of Mr. Lawson Tait, who, it is understood, will open it on the next night by an analysis of the premises on which Sir James Simpson arrived at his conclusions on hospitalism.

The operation, subcutaneous division of the neck of the femur, devised by Mr. Adams, may well be considered one of the triumphs of modern surgery. The cases in which the operation is available are not of frequent occurrence, but many may be found out and relieved who have for years been sufferers from apparently incurable lameness and deformity. In the Queen's Hospital there is at present a young woman, who for many years has had her right femur anchylosed firmly at right angles to the trunk. The neck of the bone was divided by Mr. Furneaux Jordan, and the tendons of the adductor longus and rectus femoris. No unfavourable conditions have followed, and the result promises a useful limb.

On the 8th inst. the annual dinner of the old pupils of the Birmingham medical schools was held, under the presidency of the Earl of Lichfield. The attendance numbered nearly eighty, and many present came from long distances that they might once more see the faces which formerly were familiar to them in the wards of the General and Queen's Hospitals, or on the benches of the Sydenham and Queen's Colleges. The toast of the College was proposed by the Chairman, and that of the Old Pupils responded to by Drs. Milson, Harrison, and Clayton, and by Dr. Edward Smith, of London. In replying to the toast of the Hospitals, Dr. Heslop made some extended remarks on the necessity of those reforms in hospital administration for which he is now justly celebrated, and which in time must bear fruit in Birmingham as elsewhere.

Birmingham, Dec. 10th, 1870.

## EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

ON the 23rd of last month, a memorial signed by upwards of sixty students was addressed to the President of the Royal College of Surgeons. It consists of four statements. 1. That several of the lecturers at the Royal College of Surgeons have admitted women into their classes without the least endeavour to ascertain the opinion of the male students, and, as now appears, contrary to their desire. 2. That the presence of women at the classes of Anatomy and Surgery and in the dissecting-room gives rise to various feelings which tend to distract the attention of the students from important subjects of study. 3. As the institution of mixed classes had not been determined upon when many of the present students attached themselves to this school of medicine, we are of opinion that those gentlemen who commenced their studies under the old system have suffered a certain breach of contract, inasmuch as a new element has been introduced, which would have demanded consideration in their choice of classes. 4. That the presence of women in the classes of the Royal College of Surgeons has produced and cherished a feeling of discord which threatens to lead to very serious consequences. The memorial concludes by requesting attention to these statements, and that the petition be used in such a manner as may be best suited to remove the grievance and restore the uniform good feeling between the teachers and students at the Royal College of Surgeons which, previous to this innovation, was so prominently manifest. The dignified tone of this memorial is such as to commend it to all who take the side of the male students. There is no exaggerated statement, but a simple and lucid declaration of the good feeling of those who address the President of the College of Surgeons. It should, however, be kept in mind, that the announcement was made in the daily papers that the lecturers, by a majority at their meeting, had decided to admit ladies, and this was some time before the commencement of the session. As was to be expected, the reply of the College in no way relieves the students. They have applied to the wrong quarter. The President states he has been instructed to reply that the College is not a teaching body, and, though it recognises and is interested in the success of all the extra-academical classes, it has no direct control over them, and is not responsible for the decisions of the lecturers. The College, therefore, with every disposition at all times to promote the interests of the students of the Medical School of Edinburgh, cannot interfere with the teachers who have adopted mixed classes; it can only indicate that the proper quarter to which the petitioners should apply is the Association of Lecturers, who occupy the premises at Surgeons' Hall, and are merely tenants of the College.

By those who know the constitution of the extra-academical school it could not be expected that the College of Surgeons would make any other reply. But it appears to me that an opinion on the vexed question by the College might have been of some use. I may state, for the information of your readers, that the extra-academical school in Edinburgh is open to any qualified gentleman who wishes to teach; and if he desires his course of lectures to qualify for professional examinations, he must obtain a licence to lecture from either of the Colleges of Surgeons or Physicians, which indicates that he is qualified to teach the subject he proposes to lecture on. This licence is granted after special examination, and when the candidate has shown that he is possessed of the necessary material, in the shape of a museum, &c., to illustrate his lectures. Certain of these licensed lecturers rent the lecture-rooms and premises in connexion with the building of the College of Surgeons; and on a vacancy occurring in any lectureship, they select one from amongst the candidates. The other lecturers in the extra-academical school choose their own lecture-rooms. It will appear, therefore, that the Fellows of the College of Surgeons, as a body, have not the authority to rule whether the lecturers renting their premises should or should not admit lady students to the same classes as gentlemen, and still less authority may they be expected to have over the other lecturers teaching in other premises. The fees paid by those students who do not intend taking a degree in the University are less than the University fees; and in one instance—viz., the class of anatomy—there does seem to be a hardship, that when a male student declines being taught in the same class as the females, he has no choice but either to pay the extra-academical fees, and put up with what he considers an annoyance, or pay the higher fee in the University. In the classes of surgery and midwifery he has a choice of lecturers, and can please himself as to whose class he will attend. As your correspondent does not approve of mixed classes, he certainly sympathises with those students who petition against them.

On Wednesday last the Medico-Chirurgical Society held its election meeting. The most important changes amongst the office-bearers are that Professor Lister is appointed one of the vice-presidents, and Dr. Claud Muirhead junior secretary. The public business embraced an interesting notice, by Dr. P. D. Handyside, of the occurrence of Encysted Filaria within the muscle of the Cod-fish; notes on Excision of the Mamma, by Dr. Joseph Bell; and a case of Femoral and Obturator Herniæ, by Dr. A. G. Miller. The patient in this case was operated on for femoral hernia, and made an excellent recovery, and subsequently died of obturator herniæ.

The Association for Improving the Condition of the Poor held its annual meeting on the 5th ult. Dr. Alexander Wood presented the annual report, from which it appears that this excellent Association is steadily doing its work. The object of the Association is not mere almsgiving; but it is to effect the general improvement of the poor by first finding out their wants by methodical house-to-house visitation, assisting by charity when necessary; finding work for, or stirring up to look for it, those who are out of employment, and enabling, by judicious advice, the poor to help themselves; inquiring into the sanitary state of their houses; and especially endeavouring to look after the children, and to urge the necessity of their being either sent or allowed to go to school. Considerable benefit has also been done by loans being advanced; they have been given to the number of 182, amounting to the sum of £412 15s. The great importance of industrial schools was strongly urged by Dr. Wood.

The necessity for there being a city hospital for epidemic diseases has of late been apparent, there being still a large number of fever cases in the city. The accommodation in the Infirmary is more than fully occupied, and it is now in contemplation to obtain the house formerly used as the poor-house for the Canongate parish for a fever hospital. It is, perhaps, not the best situation for such an institution, being close to the churchyard of the Canongate Church; but there may be a difficulty in obtaining a building otherwise suitable. If a permanent hospital of this kind is to be maintained by the city it should, undoubtedly, be in a more airy and less objectionable locality.

Edinburgh, Dec. 13th, 1870.

# Obituary.

## FRANCIS TAYLOR, M.R.C.S., L.S.A.

(OF ROMSEY.)

FRANCIS TAYLOR was born at Hull on July 25th, 1811, and in the year 1830 came to London to serve an apprenticeship to a practitioner of physic, and to complete the curriculum of study by "walking" a London hospital. He was a pupil of University College and of the Middlesex Hospital, and distinguished himself very highly by obtaining, among other honours, gold medals in the classes of Materia Medica and Therapeutics and of the Principles and Practice of Medicine.

As soon as Taylor had completed his studies, and "knocked himself up" with work in London, he undertook, as he thought at the time, merely for recreation, by change of occupation and of scene, the post of assistant to Mr. (afterwards Dr.) Beddome, of Romsey, Hampshire; but in this little town of Romsey Francis Taylor lived and died; and it is of his career in that town, now abruptly closed, that we have to speak with reverence and affectionate respect.

Into Romsey, Taylor came as a new light and life. He established in it a Scientific and Literary Society, and was himself the centre and source of its activity and interest. He organised a system of instruction, and delivered most valuable courses of lectures on physics and on chemistry. These lectures were all profusely illustrated by experiments, and the beauty and aptness of Taylor's apparatus were the source of much and well-merited admiration. That which probably determined his residence in Romsey was his marriage with Miss Jemima Brounger, the step-daughter of Mr. Beddome, whose assistant he was, and whose partner he afterwards became.

When it was understood that Mr. Taylor would remain in Romsey, no time was lost in conferring upon him the civic honours of the place. He was a member of the Corporation, an Alderman, and several times Mayor of the borough. Some few years ago he retired from the Corporation, but was to the time of his death one of the magistrates of the borough. In all town matters his advice was sought with eagerness, acted upon with readiness, and almost invariably with success.

In the restoration of the noble Abbey Church, the pride of Romsey and its neighbourhood, he took a foremost part, guiding the workmen not only in the general arrangement, but often in the detail of their daily labour; and with his own hand he completed the last step in the process, by fixing the cross at the summit of the nave.

Fertile of brain, and ready of hand, Mr. Taylor was constantly going beyond and outside the routine of his practice, and devising means to diminish suffering both individual and social. He was the first to make india-rubber tubes for the infants' feeding bottle; to turn, with his own hand, a boxwood shield for a cracked and lacerated breast, and afterwards to have this simple but invaluable apparatus made in glass, and fitted with the india-rubber tube.

As a surgeon Mr. Taylor was remarkably adroit; his dexterity was such as is given to few men to enjoy. He was eminently successful, and was thanked; he was intensely sympathetic, and was loved. The relation between Taylor and his patient soon passed beyond that of mere professional aid, given and received; it rose into friendship and affection. He at once inspired confidence, not by dogmatic utterances, not by a show of learning, but by interpreting the half-expressed feelings of his patients, and by devising ready means for their relief. There was a flash in his eye that lighted up a darkened room, and yet a tenderness that could hush its sobs; there was a firmness that could brook no contradiction; an earnestness that exorcised trifling or delay; a strength of arm that could lift a bed-ridden giant, and a gentleness that could make yet more smooth the softened pillow of a dying child. Stern sometimes, but always strong of purpose and of act, yet tender as a mother in his heart and voice; wide in his range of knowledge and experience, and most fertile in resource, Francis Taylor lived and laboured, and in his labour died; his name, for many years, having been one of the bright sounds to be heard in a hundred homes, his memory to be one of their most lovingly guarded treasures.

After a few warnings of heart disease, scattered over the last seven years, a fatal attack of angina pectoris removed him from his work on Friday, the 18th of November. He was interred in the Romsey Cemetery on Friday, the 25th, with all the marks of affectionate regard and sorrow that the town could render. It was a public mourning; shops were closed, and old men and children, with uncovered heads and tear-stained faces, watched the funeral procession as it passed, and followed it on its way. Francis Taylor has never rested until now; his busy brain and hard-working heart seemed incapable of repose. He was always on the strain. He rejoiced in physical exertion, and perhaps, years ago, by some great efforts that he made, laid the basis of his disease. We know not, but only surmise this possibility; but he was working to the last, and working well. Some foreshadowings seem to have presented themselves to his own mind; but there was no shadow on his heart. From what he has said again and again, we know that he confessed no romantic haste to die, but that he had begun "to long for rest." He was willing to do his work, but ready to lay it down. His faith was as simple as it was strong. It sustained him through many trials in the past, and was with him to the end; and he died as a Christian should die, without a doubt and without a fear.

# Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At the ordinary meeting of the Council held on the 8th inst., the following gentlemen (admitted Members in 1831, 1836, and 1841 respectively) were elected Fellows of the College:

Brookes, William P., Much Wenlock, Salop.
Keate, Henry, Shrewsbury.
Travers, Robert Boyle, Rostellan, Co. Cork.

The President, at the same meeting, submitted for the consideration of the Council a proposal for the formation of a collection of surgical instruments and appliances, both ancient and modern, to be added to the Museum of the College, whereupon it was resolved that the proposal of the President be approved.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Dec. 8th:—

Broom, Henry John, Pembrey, Carmarthenshire.
Fryer, John, Batley Carr, near Dewsbury.

As Assistant in Compounding and Dispensing Medicines:—

Overton, Charles Arthur, Horncastle, Lincolnshire.

The following gentlemen also on the same day passed their first professional examination:—

Deane, Robert Edmund, Leeds Infirmary.
Frean, Richard, Middlesex Hospital.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—A meeting of this Association will be held at the Scottish Corporation Hall, Crane-court, Fleet-street, this evening, (Saturday), at 7.30 P.M. Dr. Stevenson will make some observations on the Properties of Chloralum. Dr. C. J. B. Aldis will read a short paper on "Scarlet Fever for Ten Years in the Parish of St. George, Hanover-square." Prof. John Gamgee will read a paper entitled "The Milk-Supply for Towns." Dr. Ballard will read "Notes of a Case of Pemphigus, following upon inoculation from an eruption upon Milch Cows."

SURGICAL SOCIETY OF IRELAND.—The following officers have been elected for the ensuing year:—President: Albert J. Walsh. Vice-President: James H. Wharton. Council: William Hargrave, Charles Benson, Christopher Fleming, Michel Stapleton, William Jameson, Richard G. Butcher, Jolliffe Tufnell, Hans Irvine, Robert Adams, Geo. Porter, Thomas Byrne, Philip Bevan, B. Wills Richardson, Rawdon Macnamara, James Hughes, Edward Mapother, William Colles, Edward Hamilton, Humphrey Minchin, Archibald H. Jacob, H. Croly.

PRESERVED MEAT.—Dr. Stein, of Dresden, while lecturing lately on the preservation of food, opened a tin canister of meat preserved by what is known as Apert's method, and prepared by him in 1851. The meat, on examination, it is said, was found to be as fresh and of as good a flavour as when placed in the canister nineteen years previously.

THE SURGICAL AID SOCIETY.—The Rev. Daniel Moore, M.A., preached two sermons at Holy Trinity Church on Sunday last, on behalf of this charity, which supplies every description of surgical appliances to the afflicted poor without limit as to locality or disease. The collections amounted to £63 10s.

DONATIONS, BEQUESTS, &c.—"R. G. Y." has given a second £1000 to the Royal Hospital for Incurables, and "B." £500. "W. R. T." has given a second £1000 to the Westminster Ophthalmic Hospital. The National Hospital for the Paralysed and Epileptic has received £1000 from "W. X." The Children's Hospital, Birmingham, has become entitled to £300, under the will of Mr. A. S. Evans. Mr. Thomas Thornton bequeathed £200 to each of the following institutions (among others)—namely, the Asylum for Idiots, Earlswood; the Orthopædic Hospital; the Royal Hospital for Incurables, Putney; the Hospital for Diseases of the Chest, Victoria-park; and the Brixton, Streatham-hill, &c., Dispensary. Mr. E. Backhouse, Mr. James Hartley, Mr. G. Spark, Messrs. Backhouse and Co., Messrs. Lambton and Co., Messrs. Woods and Co., and Messrs. Wilson, Brothers, have each given £100 to the Sunderland Infirmary Building Fund, and thus cleared off the debt.

# Medical Appointments.

BAKER, Dr., has been appointed Physician to the Western General Dispensary, Marylebone-road, vice F. B. Nunneley, M.D., M.R.C.P.L., resigned.

BAKER, Mr. H. F., has been appointed a House-Physician at St. Bartholomew's Hospital.

BRANSON, H. J., M.D., M.R.C.P., M.R.C.S.E., has been appointed Resident House-Surgeon at the Doncaster General Infirmary and Dispensary, vice White, resigned.

BUCHANAN, G., M.D., Professor of Anatomy in Anderson's University, has been elected Consulting Surgeon to the Glasgow Maternity Hospital.

DRAKE, Mr. A. J., has been appointed a House-Surgeon to St. Thomas's Hospital.

FAUSSET, H. J., M.B., C.B., has been appointed Medical Officer for the West District of the Poplar Union, vice H. S. Gale, M.B., M.R.C.S.E., resigned.

FRANKLIN, Mr. G. C., has been appointed a House-Surgeon to St. Thomas's Hospital.

HEWETSON, R., M.R.C.S.E., has been appointed Assistant-Surgeon to the York County Hospital, vice Hornby, promoted.

HIND, H., M.R.C.S.E., has been appointed House-Physician to St. Bartholomew's Hospital, vice Dr. C. J. Davis, deceased.

HORNBY, G., M.R.C.S.E., has been appointed a Surgeon to the York County Hospital, vice H. Keyworth, M.D., M.R.C.S.E., resigned.

JONES, C. S., M.R.C.S.E., has been appointed Surgeon to the West Sussex, East Hants, and Chichester General Infirmary, vice Robert Elliott, F.R.C.S.E., resigned.

LYNE, H., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Surgeon at the Farringdon Dispensary, Bartlett's-buildings, vice B. T. Lowne, M.R.C.S.E., resigned, after twenty-six years' service.

MOORE, J. W., M.B., C.M., L.K.Q.C.P.I., has been appointed Physician to the Molyneux Asylum for Blind Females, Dublin, vice W. D. Moore, M.D., resigned.

OSBORN, Mr. S., has been appointed Resident Accoucheur at St. Thomas's Hospital.

RAVENHILL, E. B., M.R.C.S.E., has been appointed Resident Obstetric Assistant at the Queen's Hospital, Birmingham.

SYMONS, Mr. H. E., has been appointed Surgical Registrar at St. Bartholomew's Hospital.

TANNAHILL, R. D., M.D., F.F.P. & S. Glas., has been elected Physician-Accoucheur to the Glasgow Maternity Hospital.

THOMPSON, J., M.B., L.K.Q.C.P.I., L.R.C.S.Ed., has been appointed Surgeon to the Police Force, Leamington, vice Busby, resigned.

TOSSWILL, Mr. L., has been appointed a House-Physician at St. Bartholomew's Hospital.

WILSON, J. G., M.D., F.R.S.E., Professor of Midwifery in Anderson's University, has been elected Physician-Accoucheur to the Glasgow Maternity Hospital.

# Births, Marriages, and Deaths.

## BIRTHS.

ALDERSON.—On the 12th inst., the wife of F. H. Alderson, M.R.C.S.E., of Hammersmith, of a son.

ARCHDALL.—On the 6th inst., at Bolton-row, May-fair, the wife of Gordon Archdall, L.K.Q.C.P.I., M.R.C.S.E., of a daughter.

GROSVENOR.—On the 12th inst., at Ladbroke-grove, Kensington-park, the wife of G. F. Grosvenor, M.D., of a daughter.

HIRON.—On the 9th inst., at Studley, the wife of J. H. Hiron, M.R.C.S.E., of a son.

HUNT.—On the 8th inst., at Wigan, the wife of Tom Oliver Hunt, M.R.C.S.E., L.S.A., of a son.

MANLEY.—On the 9th inst., at Woolwich, the wife of W. G. N. Manley, M.R.C.S.E. (Victoria Cross), Surgeon R.A., of a son.

WILSON.—On the 9th ult., the wife of Henry Wilson, M.R.C.S., L.S.A., of Marske-by-the-Sea, Yorkshire, of a daughter.

## MARRIAGES.

LYNCH—OLIVER.—On the 10th inst., at St. Philip's, Kensington, Jordan Roche Lynch, L.R.C.P.I., only son of the late Jordan Roche Lynch, M.D., of London, to Marian, eldest daughter of the late James Oliver, Esq., of Ladbroke-square and the Inner Temple.—No Cards.

STAWMAN—MANSIE.—On the 13th inst., at the Parish Church, Silkstone, Wm. Stawman, Surgeon, of Barnsley, to Sarah, second daughter of the late Rev. A. Mansie, Missionary in Jamaica.—No Cards.

## DEATHS.

ALDERSON.—On the 14th inst., the infant son of F. H. Alderson, M.R.C.S., of Hammersmith, aged 2 days.

CHOLMONDELEY.—On the 26th ult., Joseph Cholmondeley, M.R.C.S.E., of Nottingham-place, Regent's-park, aged 75.

DAWSON.—On the 7th inst., at Great Bromley, John Dawson, L.R.C.P.Ed., formerly of Great Bentley, aged 84.

FARRANTS.—On the 10th inst., Robt. J. Farrants, F.R.C.S.E., of City-road, aged 60.

HUNT.—On the 12th inst., John Alford, infant son of Tom Oliver Hunt, M.R.C.S.E., L.S.A.

JEAFFRESON.—On the 13th inst., J. F. Jeaffreson, F.R.C.S.E., of Canonbury-lane, aged 61.

KELLY.—On the 20th ult., at Jarrow, Durham, James Kelly, L.R.C.P.Ed., M.R.C.S.E., aged 42.

LAWRENCE.—On the 14th inst., at South-street, Thurlow-square (after a long illness), Richard Moore Lawrence, M.D., M.R.C.P., late of Great Cumberland-place, W., aged 48.

MORISON.—On the 8th inst., at Welfield House, Wingate, Co. Durham (of scarlet fever), Alex. C. Rutherford, third son of John Morison, M.D.

MORRIS.—On the 7th inst., D. P. Morris, M.R.C.S.E., of Colchester, aged 46.

TOOGOOD.—On the 7th inst., Jonathan Toogood, Ext. L.R.C.P.L., F.R.C.S.E., of Torquay, aged 80.

# Medical Diary of the Week.

## Monday, Dec. 19.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Bradenell Carter: "Demonstrations of Diseases of the Eye."—Mr. John Hainworth: "Incision *sine* Excision of the Tonsils."—Mr. Gay (the President): "A Case of Glanders in the Human Subject."—Dr. Thudichum: "Clinical Experiences of the War."

## Tuesday, Dec. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Dr. Tilbury Fox: Case of Devergie's Pityriasis Pilaris. Mr. Spencer Watson: Sarcoma of the Leg (removed by Dr. Swift Walker, of Hanley); Eyeball with extensive Ossific Deposit, and peculiar Opacity of Cornea; Eyeball with a small Ossific Deposit. Dr. Greenhow: Spinal Cord from a Case of Motor Ataxy. Mr. J. E. Adams: Exostosis of Cranial Bones; Tubercular Disease of Testicle. Dr. Whipham: Disease of the Lungs in a Porpoise. Dr. Dickinson: Cystic Growth connected with Lumbar Glands.
ANTHROPOLOGICAL SOCIETY OF LONDON.—8 P.M.

## Wednesday, Dec. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

## Thursday, Dec. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 12; other Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

## Friday, Dec. 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

## Saturday, Dec. 24.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

# Notes, Short Comments, and Answers to Correspondents.

### SEWAGE-GROWN PRODUCTS.

IT has been repeatedly asserted that nothing but coarse Italian rye-grass can be grown under sewage irrigation, and that animals fed on sewage-products do not thrive and fatten. Both these assertions may now be positively denied. Mr. Hope, of Breton's farm, Romford, exhibited a stall of vegetables at the Smithfield Club Cattle Show which was no unworthy rival of the stalls exhibited by the great root-growers. Every variety of root was represented by gigantic specimens, which we believe to have been very little below the average of the general crop. There were potatoes, parsnips, carrots, mangold, beet-root, cabbages, &c., which, from the natural poverty of the Romford land, owe their size and quality to sewage; whilst oats, maize, and other experimental produce show that the capabilities of sewage as a fertiliser are not yet fully known. Mr. Hope also exhibited an old fat cow (sold for £25) which three months ago was thin and ragged. She has been fed on sewage-grown maize and sugar-beet. She was one of 111 saved from the rinderpest in 1867, and has been principally fed on sewage-grown food for four years. Let us hope we shall hear no more of such loose assertions as those which this evidence refutes.

### DR. BROWN-SÉQUARD.

WE are happy to state that an important article by this great physiologist will appear in the first number of the new year.

*Pharmacist.*—Such cases as those specified by our correspondent do not come within the terms of the penal clause of the Act.

### WHO IS RESPONSIBLE?

*Dr. Nicholas*, medical officer of health for Wandsworth, writes to correct the statement that four children were found labouring under small-pox in that district, and says our annotation was, therefore, founded upon error. Our information was derived from the report of what took place before the sitting magistrate at Wandsworth, from which it appeared that there had been neglect somewhere. We rejoice to find that the representations made to the magistrate were in all particulars greatly exaggerated, and on some points absolutely untrue.—*Mr. Oakman*, the district medical officer of St. Mary's, Battersea, writes to state that the mother of the children is asthmatic, not consumptive, and is quite able to be about the house; that the father was not ill in bed, as represented, but actually at work, earning a guinea a week regularly; and that instead of four cases of small-pox, there were only two. We are also glad to learn that the inference of neglect drawn from the information laid before the magistrate is equally unfounded. The patients were attended daily, and were ordered beef-tea, milk, and grocery from the parish store. We believe that the application to the magistrate was made in fear of the contagion, the neighbours being anxious to have the children sent away to the hospital.

*Aliquis.*—We know nothing of the establishment referred to, and assume no responsibility for the statements made by advertisers.

*Dr. Thomas Chaplin's* (Jerusalem) case shall be inserted in an early number.

### ETHICS OF THE PROFESSION.

*To the Editor of* THE LANCET.

SIR,—Mr. Walter Bryant endeavours now to shelter himself under a most unwarrantable counter-charge of carelessness on my part. A few words will suffice to clear myself of this.

I invariably at each visit looked at the urine, or asked Capt. —— about it. On Monday, October 31st (my visit was in the afternoon) I distinctly remember that, finding none in the vessel, I put the question to him, and he told me he had passed as much as usual with the motions. He was then purged, and had five or six motions in the twenty-four hours. So much for the correctness of Mr. B.'s statement that none was passed since Sunday, October 30th!

On November 1st, Capt. —— was somewhat drowsy, but quite able to speak and answer questions. He told me he was quite free from any pain, and did not complain of any difficulty in passing, or absence of, the secretion. The statement that the legs were "enormously enlarged" is equally incorrect, as they had been draining for four or five days from natural cracks and fissures, and had been reduced so as to be but very moderately anasarcous. The scrotum was considerably swollen; but there was no necessity for incisions, seeing that the tension was not excessive, and that the patient was gradually sinking. Besides, may I ask Mr. B. how it was that his son, a surgeon, who had twice seen Capt. —— professionally during the forty-eight hours (according to Mr. B.'s own admission), did not notice the alleged urgency of the symptoms, and anticipate the "humanity" of his father? Again, Capt. —— was taking nourishment moderately, and stimulants very freely, and I think that fact alone is sufficient to demonstrate the absurdity of Mr. B.'s statement, as, had retention occurred for forty-eight hours (admitting such for the moment, for the sake of argument), surely there would have been more than between a pint and a pint and a half of urine in the bladder.

It only remains for me now to recapitulate the charges I make against Mr. B., and the truth of which I consider he has either admitted by silence, or denied in opposition to proved statements.

1st. That he made no effort to keep an engagement he had himself arranged, as my first letter clearly proves.

2nd. That he sanctioned his son's visiting the patient for him, without my knowledge, though I had expressed my willingness to meet him, and I was still the medical man in attendance.

3rd. That when he himself visited the patient in my absence, he made it appear that I had neglected to relieve the bladder, when no symptoms had, at the time of my last visit, arisen to require such assistance; and that he implied to the patient's friends that that "operation," as he termed it, was *the cause* of the relief of the coma, and of the patient's again addressing them!

4th. That he also, *at that time*, made the statement that the patient's heart was "not diseased," as I had given the friends to understand, and that "he had even then a chance of recovery." The former part of this statement I conclusively proved in my last letter, and he has not attempted to deny it, though he endeavours to shirk the question by giving the evasive reply that he wrote "disease of the heart on the certificate as one of the causes of death." That Mr. B. thought well to do so after the patient's death does not alter the fact that he stated otherwise both to the friends on the evening of the 1st, and to myself at our interview. He only convicts himself of contradiction.

In concluding, I must apologise for having taken up so much of your space in what may appear a somewhat personal matter; but I consider the line of conduct adopted by Mr. B., if once tacitly submitted to, productive of so much discord among the members of our profession that I have felt called upon to bring the matter under your notice. I have been guilty of no exaggeration or misrepresentation, as Mr. B. suggests, and have so much faith in a true cause that I can say not only "magna est veritas," but add also "et prævalebit."

Your obedient servant,

Euston-square, Dec. 10th, 1870. W. S. RIDING, M.D.

*** We cannot insert any more letters on this subject.—ED. L.

*Inquirer* will find an account of Clark's water-softening process in THE LANCET of November 5th, p. 657. The process was described at greater length by Professor Frankland in the Registrar-General's Weekly Return for the week ending 29th October, obtainable (price 1½d.) at Messrs. Spottiswoodes, Queen's Printers.

### INDIAN SANITARY REPORTS.

WHILST expressing our obligations for the various Reports forwarded to our Office, we desire to intimate our intention to consider them as soon as practicable.

### THE TREATMENT OF PLEURO-PNEUMONIA.

THE treatment of pleuro-pneumonia in cattle has attracted a good deal of attention of late. Carbolic acid has long been recognised as an excellent agent in cases of pleuro-pneumonia, though experience shows that it is more effective as a prophylactic than as a curative. The most successful treatment which has been tried and officially reported on by the veterinary medical advisers of the Privy Council in contagious pleuro-pneumonia consists of the external and internal use of carbolic acid, with strict attention to diet and temperature. Carbolic acid (crystalline), one drachm; rectified spirit, two ounces; linseed mucilage, one pint: shake the acid with the rectified spirit, and add the mucilage. This dose should be given twice a day to an adult animal, and half the quantity twice a day to a steer or heifer. Carbolic acid mixed with fifty parts of water should be freely used to the floors of the sheds in which the cattle (sick and healthy) are kept; a strong odour of the acid should always prevail in the sheds if the agent is used sufficiently often. Very little benefit is likely to result unless the treatment is commenced in the early stage of the disease, and, even then, the major part of the cases terminate fatally.

*Mr. Tatham* will oblige by sending us an account of the adjourned inquest.

### RECOVERY FROM RUPTURE OF THE UTERUS.

*To the Editor of* THE LANCET.

SIR,—The following cases in my practice may be interesting to your readers.

April 12th, 1870.—C. W——, aged thirty-five, multipara, had been in labour twelve hours under the care of a midwife. Mr. Ilott and myself were called in. We found the os dilated, and arm presenting, the pains frequent and powerful. We put her under chloroform, and tried to turn, but failed. We then decided to decapitate, which, assisted by Mr. McKenzie, Resident Accoucheur to the London Hospital, we did, and in due course delivered. On introducing my hand to remove the placenta, I found a laceration in the posterior wall of the uterus, six inches long. Mr. McKenzie also introduced his hand, and felt the laceration. The after-treatment consisted in keeping her under the influence of opium for eight days. She took fifteen minims of tincture of opium every two hours for the first three days, and the next five days the same quantity was given every four hours. This kept her semi-comatose, and almost free from pain. She took plenty of gruel and beef-tea, and passed urine regularly. On the ninth day the opium was stopped. On the tenth day the bowels acted for the first time. Afterwards her recovery was slow but uninterrupted.

*Death from Cancer of the Uterus and Labour.*—On August 12th, 1870, I was called to E. P——, aged thirty-three, seven months pregnant with her tenth child. I found the os undilated, and extensively thickened and indurated with cancer. The pains were strong. After two days' hard labour (with the exception of a few hours' rest at night, procured by a dose of opium), the os was not in the least dilated, and the patient showed symptoms of exhaustion. I made up my mind to incise the os, and deliver with the long forceps. While away fetching the instruments, the uterus lacerated itself through the os posteriorly for about three inches, so that there was no occasion for an incision. The vertex was presenting. Mr. Herman, Resident Accoucheur to the London Hospital, whose assistance I had sought, kindly gave chloroform because the patient was very obstreperous, and I delivered with the long forceps. She died of exhaustion in fourteen days.

Yours truly,

Commercial-road, December, 1870. J. WILLIAM KAY.

*Mr. Smith and Dr. Monro.*—We have received a letter from each of these gentlemen. The letter of Dr. Monro puts the case in a very different light from that in which Mr. Smith puts it. Under these circumstances, we think it well not to publish the correspondence, and we should be glad to hear that our correspondents had reconsidered the matter in dispute, and come to a friendly understanding about it.

*Bona Fides.*—We do not prescribe. Consult a medical man.

### POISONING BY COAL-GAS.

*To the Editor of* THE LANCET.

SIR,—In reference to a paragraph which heads the report of a case of Poisoning by Coal-gas in last week's LANCET, I beg to state that two cases of a similar nature, which were treated in St. Mary's Hospital under Dr. Sieveking, were reported in your impression of Jan. 30th, 1869, by his

December, 1870. HOUSE-SURGEON.

### MAIN DRAINAGE OF DUBLIN.

WE are glad to learn that in the arrangements of the proposed Bill there is a provision to the effect that none of the sewage is to be carried into the bay or estuary of the river, but is to be collected in a reservoir near the North Bull, thereby allowing it to be utilised by being applied to waste lands, thus rendering them valuable property.

*J. T., M.B.*, (Darlington.)—Dr. Parkes's work on Hygiene, published by Churchill.

### THE FARRINGDON GENERAL DISPENSARY.

*To the Editor of* THE LANCET.

SIR,—I beg, through the medium of your journal, to draw the attention of the profession to the Farringdon General Dispensary, the Committee of which institution have recently advertised for a resident medical officer, at a salary of £70 per annum, gentlemen with superior qualifications being invited to apply. The successful candidate is, I presume by the advertisement, expected to provide a servant out of this miserable pittance, besides sustaining his position in society as a gentleman and a member of an honourable profession—a sum which an ordinary mechanic would easily earn during the same period. I regret to state that there are already upwards of seven applicants in the field for this lucrative appointment; the Committee evidently valuing the services of the dispenser at a higher rate, as this gentleman's salary is £75 per annum. Comment is unnecessary.

I am, Sir, your obedient servant.

Brixton Dispensary, Dec. 12th, 1870. R. MANSELL JONES.

*W. H. E.*—We are unable to decipher all that is contained in our correspondent's communication; but so far as we have succeeded we will reply to him. Syphilis takes its place among those diseases that depend upon an animal poison. It infects the system, and gives rise to a definite series of morbid phenomena. It does not, as a rule, repeat itself in the same individual; in other words, one attack of syphilis is protective against a recurrence of that disease. As in the case of small-pox, measles, and the other exanthemata, it sometimes happens that an individual is attacked more than once with syphilis; the immunity conferred by one attack is relative, not absolute. Setting aside cases of idiosyncrasy, we may suppose that the stronger the power of the poison to which the constitution paid tribute in the first instance, the more marked the syphilitic manifestations; and the more recent the date at which these occurred, the less likely would it be for the patient to contract the disease afresh. He may, of course, contract the local soft venereal ulcer any number of times; but the true syphilitic virus would probably give rise to a modified morbid process in the person of one already syphilitic.

*Mr. James Whitworth.*—The qualification is recognised by the Poor-law Board.

### FRACTURED CLAVICLE.

*To the Editor of* THE LANCET.

SIR,—As accidents of the nature I am about to describe are few and far between, and not uninteresting, as being of a sort we may possibly hear of after the close of this war, I would ask to draw your attention to the following case of fractured clavicle.

A few months ago I attended J. P——, a joiner, aged twenty-five years, of fair muscular development, and perfectly healthy. Having gone out bird-shooting, and being unaware that the gun had lain for some time loaded, he put down a charge, and, on firing at his bird, was laid on the flat of his back by the tremendous recoil which took place. At this time he was not conscious of being disabled in any way, though he did suffer from some slight pain over the spot where he had been struck. Next day, on working a pit-saw, all at once he felt, as he thought, something give way, and thereupon became unable to use his right arm. Soon after this I visited him, and found him seated on a chair, with the elbow of the disabled limb planted on the right thigh, and the forearm supported by the left hand. I laid him supine on an inclined mattress, and proceeded to examine him; but failed to arrive at a conclusion as to the exact nature of the injury, on account of the great tumefaction. *Primâ facie*, from the history and appearances, I thought it a case of dislocation backwards at the sterno-clavicular articulation, and consequently, with a view to reducing it as soon as the tumefaction had disappeared, I prescribed rest in the supine posture, with the use of evaporating lotions. Two days after this the swelling had gone down, and the shoulder could bear handling; so I now determined to make assurance doubly sure, and on running my fingers along the clavicle, the state of things I now found did not justify my former anticipations; for a tumour, abrupt and hard, situated an inch and a half from the external end, led me to suspect I had a fracture to deal with. Manipulation confirmed me in this, as I found the internal end of the external fragment driven backwards and upwards, while the internal portion was in its normal position. Further manipulation elicited hard crepitus, which, of course, set the matter at rest. The treatment was now quite simple. With very little difficulty I put the fractured bone *in situ*, using Desault's mechanical method of bandaging to keep the parts in apposition. In three weeks there was thorough and complete ossification. Yours faithfully,

JOHN SHIVES, M.B., C.M., L.R.C.S. Ed.

Millbridge, near Leeds, December, 1870.

*Dr. L. C. McElroy*, (Lancerville, Ohio.)—We have received our correspondent's suggestive paper, which shall have early insertion, and we will endeavour to bear in mind his request.

### AN UNCOMMON FORM OF COMPOUND PRESENTATION.

*To the Editor of* THE LANCET.

SIR,—On the night of December 8th, I was called to see the wife of a publican, J. T——, aged thirty-five, who was in labour, and had not previously bespoken any medical man to attend her. The following is the history of the case.

The patient was a woman of weakly constitution, and her last child was born six years ago. On December 4th the liquor amnii had escaped, since which time she had been occupied in her usual household duties, which were rather onerous. On the afternoon of the 8th she went to bed about five o'clock, as she felt some slight pains come on, which continued until my arrival, a little before twelve P.M. On examination, I found the os uteri fairly dilated, and the head and a leg presenting. The face of the child pointed towards the pubes, and the toes of the foot also pointed in the same direction, the foot presenting foremost. Some traction on the foot producing no effect on the head, and the direction in which the toes pointed, led one fairly to suppose that it belonged to another child. The pains being short, and seeming to produce no effect, I gave some ergot, and repeated it two or three times without apparently much improvement in the uterine action. Waiting for some little time, and finding the patient was getting weaker, I sent for Mr. Harris, of Mildenhall, and we agreed, the head still being within the cavity of the uterus, that it was best to apply the long forceps at once, which we did, and brought away a dead child, the funis being wound round the neck, and passing underneath the left thigh. The left limb was twisted, and this accounted for the position of the presenting foot. The mother was much exhausted, having been obliged to be kept up with brandy constantly. On the placenta being detached, a sudden hæmorrhage occurred, and the patient died almost immediately.

I have been induced to publish this case by the following reasons:—

1st. The difficulty of diagnosing it correctly, the direction of the toes leading one to suppose there was a second child, but which was afterwards accounted for by the limb being twisted. How this twisting was produced I am unable to state. Might it be from the position of the cord?

2nd. Not having seen a similar case recorded.

I remain, Sir, yours truly,

Mildenhall, Dec. 12th, 1870. C. T. WINCKWORTH, M.R.C.S.

*R. W.*—It is impossible to advise in such a case upon an *ex-parte* statement. As a general principle, we should say that the practitioners in a locality have a right to refuse to attend Clubs, except for fitting remuneration and upon reasonable conditions, and also to refuse to meet any practitioner who, in the face of their protest, accepts an improperly low rate of payment, or permits the admission of improper persons as members. But if the practitioners absolutely refuse to attend Clubs at all, on any terms whatever, then we think they have no right to attempt to fetter the liberty of action of a new-comer. The merits of such a case are generally well understood in the place where it arises, and public sympathy is certain to be ranged, in the long run, upon the side of substantial fairness and justice. The query came too late to be answered last week.

*Mr. James St. Clair Gray*, (Glasgow.)—Thanks for the communication, which shall receive our early attention.

### BOARDING-OUT OF PAUPER CHILDREN.

*To the Editor of* THE LANCET.

SIR,—In an article in your journal of last week you refer to the new system of boarding-out pauper children, and suggest in connexion therewith the establishment of a Central Committee in London and District Committees in the provinces to provide the necessary voluntary assistance towards obtaining suitable persons to take charge of the children, and to exercise proper supervision. Allow me to call your attention and that of your readers to the existence of a Society, the Infant Life Protection Society, which professes to accomplish this work. The following are its principal objects:—

1. To prevent the destruction of infant life, and the moral and physical injury to young children, caused by the present system of baby-farming; and, with this view, to promote a Bill in Parliament requiring that any person taking charge of an infant or young child for gain shall be certified as of good character, and be registered, and that every child so placed out shall be subject to proper supervision.

2. In the event of the proposed Bill being passed by Parliament—to promote the formation of District Committees, with a view to the selection and supervision of nurses of good character resident in suitable localities.

3. To promote the boarding-out of destitute orphans and deserted children in healthy places, and with trustworthy persons, instead of their being left under the injurious moral and physical influences of workhouse nurseries and schools.

4. To promote the amendment of the laws relating to bastardy and to the registration of births and deaths, and of the law of evidence in cases of infanticide.

This Society has prepared a Bill "for the Better Protection of Children," embodying its first object. This Bill was placed in the hands of the Home Secretary by a deputation from the Society, with a desire that the Government will see fit to bring in a Bill on the principles therein suggested. Should the Government decline to bring in a satisfactory Bill, this Society will be prepared to appeal for public and parliamentary support towards carrying a Bill through Parliament by the hands of a private member of the House during the coming session.

This Society is about to issue an appeal to ladies and gentlemen, interested in its objects, to join the Society, and assist in the formation of District Committees. I am, Sir, yours faithfully,

December 14th, 1870. J. BRENDON CURGENVEN, Hon. Sec.

*A Constant Reader.*—For a person who is not a surgeon to call himself so, whether with the addition of "dentist" or not, is forbidden by the Medical Act, as well as by ordinary morality, and is punishable by a fine not exceeding twenty pounds, and recoverable on summary conviction before a magistrate.

### "A SHAKER HOUSE."

*To the Editor of* THE LANCET.

SIR,—In reading your notice of the sanitary arrangement of Compton House, Liverpool, it recalled vividly to my recollection what I had read in Mr. Hepworth Dixon's "New America" respecting the sanitary condition of a "Shaker's House." "My room," he states, "was painfully bright and clean. No Haarlem vrow ever scraped her floor into such perfect neatness as my floor; nor could the wood of which it is made be matched in purity, except in the heart of an uncut forest pine." He goes on to state that everything about the room was scrupulously clean; then mentions that the "Shakers" have no doctors among them, and smile at our gentile ailments—headaches, fever, colds, and what not; take a close and scientific care of their ventilation. Every building on Mount Lebanon—farm, granary, mill, and dwelling—is provided with shafts, fans, flappers, drafts, and vents. The stairway is built as a funnel, the vane as an exhauster. Stoves of a special pattern warm the rooms in winter, with an adjustment delicate enough to keep the temperature for weeks within one degree of warmth. Fresh air is the Shaker medicine. "We have had only one case of fever in thirty-six years," says Antoinette, "and we are very much ashamed of ourselves for having had it; it was wholly our fault." Mr. Dixon, having visited North House, the dwelling of Elder Frederick's family, goes on to state that he observed "the same whiteness and brightness, the same order of things. Antionette led me over it from the fruit-cellars to the roof, showing me the kitchens, the ladies' chambers, the laundries, the meeting-rooms, and the stoves. My friend William Haywood (Civil Engineer to the City of London) and his wife were with me. The engineer was no less smitten by surprise at the singular beauty and perfect success which the Shakers have attained in the art of ventilation than the lady was charmed by the sweetness, purity, and brightness of the corridors and rooms." Mr. Dixon does not give us an insight into the mechanism as to how these excellent sanitary engineering (if I may so call them) arrangements were carried out with such excellent perfection as regards ventilation, heating, &c. &c. But it is to be hoped that his friend Mr. Haywood has not forgotten the cardinal points of what he observed, and that he will induce the authorities of the City of London to carry out, wherever they may have an opportunity of doing so, these unexceptionable sanitary arrangements in the dwellings of their poorer brethren, as well as giving the public generally a succinct account of what he saw, and how to carry it out at the smallest possible cost.

I am, Sir, yours, &c.,

Grove-road, St. John's-wood, Dec. 13th, 1870. H. HOBSON RUDD.

### DISEASED MEAT.

ANOTHER butcher, this time from the West of England, has been mulcted in a London Police Court for sending diseased meat to the metropolitan market. The magistrate, Alderman Sir J. Lawrence, appeared to be of opinion that there were extenuating circumstances, and let the offender off with a fine instead of imprisonment. It was alleged for the defence that, owing to a scarcity of provender, a farmer sold two animals to the butcher for £5, the hides and offal of which were worth £2; yet there was nothing the matter with the beasts, save that they were old! We should like to hear an agriculturist's opinion on this transaction.

### VACCINATION.

*To the Editor of* THE LANCET.

SIR,—Some time ago you were kind enough to insert a letter of mine, containing some remarks on the best method of carrying out vaccination effectually in the country districts. May I again trouble you to draw attention to this subject, and I am induced to do so by reading the report of Dr. Buzzell, medical inspector of vaccination for this union, as it proves the antipathy the poorer classes have to the present arrangement, and therefore they resort to every dodge to delay or avoid vaccination; and I must say, even if I provoke the censure of some of my professional brethren, that I hardly wonder it is so, as I know as a fact that many cases are vaccinated by unqualified deputies and persons having no reason to be over particular in the operation. The poor know this themselves. Therefore how do they act? Why, they simply try to avoid the operation.

I beg to suggest a practical remedy for this state of affairs, which will entail no extra expense to the country, and which will to a great extent, if not entirely, get over the great repugnance of the poor to vaccination. It is to allow any qualified registered practitioner to become a public vaccinator, should he wish. By so doing I am convinced the Act would work far more efficiently; the poor in very many instances would cheerfully allow a "Dr." in whom (as they say in Somerset) they have "faith" to vaccinate their little ones. This arrangement would remove the stigma which now seems to be attached to the operation by its being so intimately associated with the parish—a word which we all know is not altogether relished by the more respectable of the working classes; and, on the other hand, it would be giving the country practitioner the option of vaccinating his own poorer patients, who now, simply to save the fee (which they are not often in a position to pay over and above their midwifery fee), either avoid the operation, or perhaps, after considerable delay, reluctantly allow the parish officer to operate; and should any illness occur afterwards, especially any skin affection, vaccination is immediately stated to be the cause, and so the operation is brought into disrepute. I contend, had these the option of going (which they ought to have) to their own attendant, no such complaint would arise. Surely consideration ought to be shown to our poorer neighbours, and especially if by so doing good can be done to the community at large.

Should my suggestion meet with the approval of any of your readers, I shall be much obliged by their communicating with me.

I am, SIR, yours faithfully,

Yeovil, December, 1870. E. C. GARLAND.

*Radius.*—1. We believe that the nitrite of amyl has been used internally in a few cases; but it is commonly given by inhalation. The patient takes a single sniff at the bottle containing it, for the purpose of relaxing spasm in angina, asthma, or tetanus. — 2. A palatable cod-liver oil is advertised weekly in our columns.

### PROFESSIONAL ETIQUETTE.

*To the Editor of* THE LANCET.

SIR,—Mr. Thomas, in his letter in your impression of the 3rd instant, admits that he did visit my patient, and that he afterwards removed my splints. This, permit me to say, I was totally ignorant of until the splints were returned to my surgery. As to Mr. Thomas's statement respecting the position of the limb, and the "tilting upwards of the broken ends," I most emphatically deny it. The man complained of no pain whatever to me at the seat of fracture, but did of some uneasiness in the outer malleolus, to relieve which I inserted some tow, and before my leaving the house he expressed himself as being quite easy. This was, I believe, the day subsequent to Mr. Thomas's diagnosis of the "*oblique fracture*" through splints, &c., by his "*superficial* examination" of the limb.

I regret to have to report such conduct of a brother practitioner; but Mr. Thomas's repeated interference with my patients leaves me no other alternative.

Your obedient servant,

J. DAVIES, M.D.,

Medical Officer to the Llynvi Iron Works, &c.

Maesteg, Glamorganshire, Dec. 12th, 1870.

*L.M.*—Such qualifications cannot now be, or at least are not, registered, except in connexion with other qualifications. The suggestion of our correspondent shall be considered.

### SMALL-POX IN MILE-END.

*To the Editor of* THE LANCET.

SIR,—The unjust remark with which Dr. Corner, in his letter in your issue of Dec. 3rd, concludes his explanation as to the alleged "40 cases of small-pox in the workhouse," induces me to solicit space for a few words in reply.

The doctor being unfortunately gifted with a power of writing somewhat sensationally, I have on more than one occasion been called upon to allay excitement thus created. Hence his apparent annoyance. My letter to you of the 10th of November was sent by order of the Board, and I was not until the 29th of the same month that I heard from Dr. Corner how the mistake arose. Of course, in his reading the report to the vestry from his rough draft, an error might easily have been made; but when discovered, ought he not instantly to have corrected it? If he had furnished me with the necessary material, I should only have been too happy to have corrected a misstatement which has been prejudicial to Mile-end. Dr. Corner can but admit that by sending to THE LANCET his report *as printed*, he vouched for the correctness of the error he now seeks to amend.

I am, Sir, yours obediently,

Bancroft-road, Mile-end, Dec. 14th, 1870. E. J. SOUTHWELL.

### HOSPITALISM.

WE have received a valuable article from *Mr. Holmes* on "Hospitalism" in reply to the series of papers on the same subject by the late Sir James Simpson, Bart., the last of which we recently published. As it would be impossible to publish the whole of the article in the current volume of THE LANCET, we prefer to postpone the commencement of it to the first number of the new volume.

*Medicus.*—We fear not. The gentlemen alluded to generally avoid bringing themselves within reach of the law.

*Dr. Balbirnie* is thanked for his suggestions, which shall be considered, and for his acceptable approval. A short letter for publication would receive attention.

*M.R.C.S.*—We cannot speak confidently about Heidelberg; but such degrees may be obtained at Jena or Giessen or Erlangen. At St. Andrews ten persons yearly, over forty years of age, may receive the degree without the condition of residence.

*Quærens.*—If there be any law to punish such an offence, we have no knowledge of it.

*Beta.*—The course usually followed is for the new-comer to call upon the resident practitioners.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Barnard Holt; Dr. Brown-Séquard, Brighton; Lieut.-Col. Lethbridge; Mr. Robt. Greive; Mr. Burr; Mr. R. S. Bateson; Mr. Dunham; Dr. Morris; Mr. Crawford; Mr. St. Clair Gray, Glasgow; Mr. Alderson; Dr. Mitchell, Cambeltown; Mr. Hunt, Roxbon; Dr. Evans, Narberth; Mr. Russell; Mr. R. Whewell, Ilfracombe; Mr. Killick; Mr. J. Tatham, Salford; Mr. Ryan, Colchester; Mr. Wood; Mr. Garland, Yeovil; Mr. Teale; Mr. Heaton; Mr. Douglas, Salgrave; Dr. Staniland, Bow; Dr. Brooter, Williton; Mr. Curgenven; Dr. Calthrop, Hornsey-rise; Dr. More, Rothwell; Mr. Rees; Dr. Galton, Upper Norwood; Mr. Bellamy; Dr. Southwell, Stepney; Dr. Andrews, Jamaica; Dr. Arnold, Demerara; Mr. J. Morison, Wingate; Mr. Austen; Mr. Pugin, Ramsgate; Dr. Monro, Bath; Mr. R. Jones; Mr. J. Lawrence; Dr. Matthews, Carnforth; Mr. Meyer; Mr. Brown; Dr. Davies, Maesteg; Mr. Hind; Mr. J. F. Smith, Bath; Dr. Wilson, Glasgow; Dr. Whitworth, Tipton; Dr. Coates; Dr. Arnison; Mr. Addison; Dr. Nicholas, Wandsworth; Dr. Riding; Mr. Bengough; Dr. Oakman, Battersea; Mr. Reeve; Mr. W. C. Walker, Shepton Mallet; Dr. Chaplin, Jerusalem; Mr. Harris; Dr. Fenton, Coventry; Messrs. Barrat and Co.; Dr. Steele, Fort Grange; Mr. Guyon; Messrs. Davidson and Co.; Dr. Allen, Lowell, Mass.; Messrs. Zimmermann and Co.; Mr. E. Lund; Dr. Roberts, Bradford; Mr. Jones; Dr. Hopgood; Dr. Mackintosh; Mr. Lyne; Mr. Beckingsall; Mr. Davis, Liverpool; Mr. Turner; Mr. Nicholls; Dr. Robinson; Mr. Burnett; Mr. Taylor, Bradford; Mr. Harward; Mr. Williams; Mr. Willis; Mr. R. Henderson; Mr. Taplin; Dr. Clarke; Mr. Lawton; Mr. Wayne; Mr. Cullinan, Ennis; M. Le Folles; Dr. Purvis; Mr. T. Holmes; Mr. Mitell, Bradford; Miss E. S. Langston; Mr. Whitgreave, Manchester; Dr. Brue, Colchester; Dr. Hardie, Manchester; Mr. Darnley; Mr. O'Brien, Galway; Dr. Cartwright Reed, Fulham; Mr. Roberts; Mr. Winckworth, Mildenhall; Dr. Brown, Rochester; Dr. Ross, Chesterfield; Dr. Quinlan, Dublin; Dr. McLean, Glasgow; Inquirer; Quærens; Aliquis; A Constant Reader; Expectans; Radius; L. M.; Ignoramus; Beset with Quacks; J. T.; M. B.; Medical Jurisprudence; A. B.; Bona Fides; X. A.; M.R.C.S.; Not a Dispensary Fellow; A Constant Reader; H. H.; A Naval Surgeon; Medicus; House-Surgeon; W. H. L.; A. B. C.; &c. &c.

*Brighton Guardian, Northampton Mercury, Wandsworth Times, Manchester Examiner, Essex News, Salford Chronicle, Redditch Indicator, Leicester Chronicle, Brighton Examiner, Supplement to the Liverpool Daily Post, Belfast News Letter, North Wales Chronicle,* and *Bulman's Weekly News* have been received.


## NOTICE TO SUBSCRIBERS.

IN conformity with the New Regulations of the Post-office authorities, the numbers of THE LANCET are now issued in an unstitched form only. The terms of Subscription are as follows:—

| UNSTAMPED. | | | | | | | |
|---|---|---|---|---|---|---|---|
| One Year | £1 | 10 | 4 | Six Months | £0 | 15 | 2 |

| STAMPED (*free by post*) TO ANY PART OF THE UNITED KINGDOM. | | | | | | | |
|---|---|---|---|---|---|---|---|
| One Year | £1 | 12 | 6 | Six Months | £0 | 16 | 3 |

| TO THE COLONIES. | | | | TO INDIA. | | | |
|---|---|---|---|---|---|---|---|
| One Year | £1 | 14 | 8 | One Year | £1 | 10 | 0 |

Post-office Orders in payment should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable to him at the Post-office, Charing-cross.

## TERMS FOR ADVERTISING IN THE LANCET.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| For 7 lines and under | £0 | 4 | 6 | For half a page | £2 | 13 | 0 |
| For every additional line | 0 | 0 | 6 | For a page | 5 | 0 | 0 |

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.